Drinking Water Surveillance Program

DRESDEN WATER TREATMENT PLANT

Annual Report 1989

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DRESDEN
WATER TREATMENT PLANT

DRINKING WATER SURVEILLANCE PROGRAM

ANNUAL REPORT 1989

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EXECUTIVE SUMMARY

DRINKING WATER SURVEILLANCE PROGRAM

DRESDEN WATER TREATMENT PLANT
1989 ANNUAL REPORT

The Drinking Water Surveillance Program (DWSP) for Ontario is a monitoring program providing immediate, reliable, current information on drinking water quality. The DWSP officially began in April 1986 and is designed to eventually include all municipal supplies in Ontario. In 1989, 65 plants were being monitored.

The Dresden Water Treatment Plant is a direct filtration plant which treats water from the Sydenham River. The process consists of coagulation, flocculation, filtration, and disinfection. This plant has a rated capacity of 3.8 x 1000 m^3/day and serves a population of approximately 2500.

Water samples from the raw and treated water at the plant and from two sampling sites in the distribution system were taken monthly and analyzed for the presence of approximately 180 parameters. Parameters were divided into the following groups: Bacteriological, Inorganic and Physical (Laboratory Chemistry, Field Chemistry and Metals) and Organic (Chloroaromatics, Chlorophenols, Pesticides and PCB, Phenolics, Polyaromatic Hydrocarbons, Specific Pesticides and Volatiles).

A summary of results is shown in Table A.

The Ontario Drinking Water Objective (ODWO) of 10 mg/L for nitrates was exceeded in the treated and distributed waters sampled in February, April and June. The ODWO for turbidity of 1 Formazin Turbidity Unit was exceeded in the treated water in February. The District Officer was notified on all occasions.

All other Inorganic and Physical parameters were below any applicable health related ODWOs.

Samples were analyzed monthly for the presence of approximately 110 Organics. Levels did not exceed health related guidelines.

While no ODWOs for pesticides were exceeded, more are found at quantifiable levels in the Dresden Supply than at any other supply in the program. The 1989 DWSP sampling results confirm those of previous years and indicate that the source water is adversely impacted as a result of agricultural activities in the watershed.

TABLE A

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP

SUMMARY TABLE BY SCAN

SCAN	RAW			TREATED			SITE 1			SITE 2		
	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE	TESTS	POSITIVE	%POSITIVE
BACTERIOLOGICAL	39	37	94	36	11	30	36	14	38	27	13	48
CHEMISTRY (FLD)	27	27	100	54	53	98	113	109	96	80	78	97
CHEMISTRY (LAB)	273	255	93	273	222	81	444	392	88	316	281	88
METALS	311	202	64	311	172	55	564	342	60	400	242	60
CHLOROAROMATICS	181	0	0	153	0	0	168	0	0	125	0	0
CHLOROPHENOLS	12	0	0	12	0	0	.	.	.	.	.	.
PAH	209	0	0	209	0	0	.	.	.	.	.	.
PESTICIDES & PCB	442	8	1	400	8	2	330	4	1	254	4	1
PHENOLICS	13	12	92	13	12	92	.	.	.	.	.	.
SPECIFIC PESTICIDES	64	0	0	62	0	0	12	0	0	9	0	0
VOLATILES	377	1	0	377	51	13	348	47	13	261	35	13
TOTAL	1948	542		1900	529		2015	908		1472	653	

THE ODWO FOR TURBIDITY (1 FTU) WAS EXCEEDED IN TWO TREATED WATERS THE ODWO FOR TOTAL NITRATE(10 MG/L) WAS EXCEEDED IN THREE TREATED WATERS

A POSITIVE VALUE DENOTES THAT THE RESULT IS GREATER THAN THE STATISTICAL LIMIT OF DETECTION AND IS QUANTIFIABLE
A '.' INDICATES THAT NO SAMPLE WAS TAKEN

DRINKING WATER SURVEILLANCE PROGRAM

DRESDEN WATER TREATMENT PLANT
1989 ANNUAL REPORT

INTRODUCTION

The Drinking Water Surveillance Program (DWSP) for Ontario is a monitoring program providing immediate, reliable, current information on drinking water quality. The DWSP officially began in April 1986 and is designed to eventually include all municipal supplies in Ontario. In 1989, 65 plants were being monitored.

The DWSP was initiated at the Dresden Water Treatment Plant in February of 1986. Annual reports were published for 1986 (ISBN 0-7729-2552-6), 1987 and 1988(ISSN 0839-8984).

This report contains information and results for 1989.

In order to accommodate the increased number of plants on the DWSP and to facilitate the timely completion of the 1989 annual reports, plants with two or more years of published data will receive an abbreviated annual report. This report maintains the same general format as in previous years but does not include a comprehensive discussion of the results. For more detail on the parameters analyzed and discussion of the results, consult the 1987 and 1988 reports.

PLANT DESCRIPTION

The Dresden Water Treatment Plant is a conventional treatment plant which treats water from the Sydenham River. The process consists of coagulation, flocculation (upflow clarifier), filtration and disinfection. Sodium silicate activated with sodium bicarbonate is used as a coagulant aid and potassium permanganate is used for taste and odour control. Powdered activated carbon is applied for pesticide removal. This plant has a rated capacity of 3.8 x 1000 m^3/day and sample day flows ranging from 1.9 x 1000 m^3/day to 7.2 x 1000 m^3/day. The Dresden plant serves a population of approximately 2500.

The plant location is shown in Figure 1. Plant process details, in a block schematic, are shown in Figure 2. General plant information is presented in Table 2.

SAMPLING AND ANALYSIS

Plant operating personnel perform analyses on parameters for process control (Table 1).

Water at the Dresden Water Treatment plant and at two locations in the distribution system was sampled for the presence of approximately 180 parameters monthly in 1989. The Specific

FIGURE 1

DRINKING WATER SURVEILLANCE PROGRAM

SITE LOCATION MAP

DRESDEN WATER TREATMENT PLANT

FIGURE 2

DRESDEN WATER TREATMENT PLANT

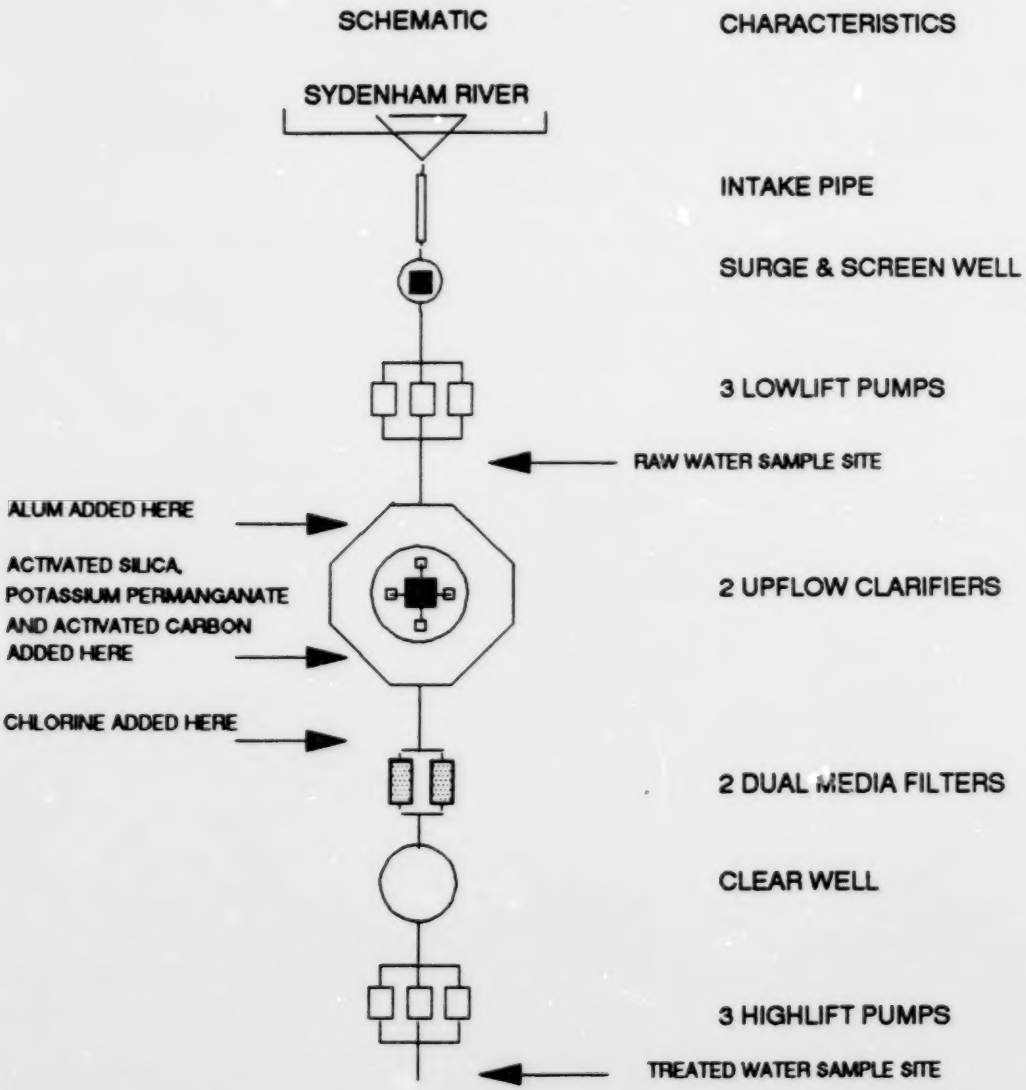

TABLE 1

DRINKING WATER SURVEILLANCE PROGRAM ANNUAL REPORT

IN-PLANT MONITORING DRESDEN WTP 1989

PARAMETER	LOCATION	FREQUENCY
Chlorine residual-combined	After filters	4 times/day
-free	Treated water	4 times/day
Temperature	Raw water	daily
Turbidity	Raw water	daily
	Clarifier effluent	daily
	Treated water	3 times/day

TABLE 2

DRINKING WATER SURVEILLANCE PROGRAM ANNUAL REPORT

GENERAL INFORMATION

DRESDEN WATER TREATMENT PLANT

LOCATION:	749 PEEL STREET, P.O. BOX 1120 DRESDEN, ONTARIO N0P 1M0 (519-683-6103)
SOURCE:	RAW WATER SOURCE - SYDENHAM RIVER
RATED CAPACITY:	3.8 (1000 M^3/DAY)
OPERATION:	MINISTRY OF THE ENVIRONMENT
PLANT SUPERINTENDENT:	C. SHERMAN
MINISTRY REGION:	SOUTHWEST
DISTRICT OFFICER:	O. WIGLE

MUNICIPALITY SERVED	POPULATION
DRESDEN	2,504

Samples for pesticide and chlorophenol analysis were taken in June and November only. Polyaromatic Hydrocarbons and Phenolics are only analyzed in the raw and treated water at the plant. As of August 1989, the analysis of Triazine pesticides was dropped from the distribution sample. Laboratory analysis was conducted at the Ministry of the Environment facilities in Rexdale, Ontario.

RESULTS

Field Chemistry measurements were recorded on the day of sampling and were entered on the DWSP data base as submitted by plant personnel.

Table 3 contains information on the sample day retention time, flow rate and treatment chemicals used and their associated dosages. In April 1989, plant personnel encountered problems with flow meters and no longer reported the flow rates or chemical dosages.

Table 4 is a summary break-down of the number of water samples analyzed by parameter and by water type. The number of times that a positive or trace result was detected is also reported.

Positive denotes that the result is greater than the statistical limit of detection established by the Ministry if the Environment (MOE) laboratory staff and is quantifiable. Trace (<T) denotes that the level measured is greater than the lowest value detectable

by the method but lies so close to the detection limit that it cannot be confidently quantified.

Table 5 presents the results for parameters detected on at least one occasion.

Table 6 lists all parameters analyzed in DWSP.

Associated guidelines and detection limits are also supplied on tables 5 and 6. Parameters are listed alphabetically within each scan.

DISCUSSION

General

Water quality is judged by comparison with the Ontario Drinking Water Objectives (ODWOs) as defined in the 1984 publication (ISBN 0-7743-8985-0). The Province of Ontario has health related and aesthetic objectives for 49 parameters. These are currently under review. When an ODWO is not available, guidelines/limits from other agencies are consulted. The Parameters Listing System (PALIS), recently published (ISBN 0-7729-4461-X) by the MOE, catalogues and keeps current over 1750 guidelines for 650 parameters from agencies throughout the world.

Many of the compounds detected are naturally occurring or are

treatment by-products.

IN THIS REPORT, DISCUSSION IS LIMITED TO THE TREATED AND DISTRIBUTED WATER AND ADDRESSES ONLY THOSE PARAMETERS WITH CONCENTRATIONS ABOVE GUIDELINE VALUES AND ORGANIC PARAMETERS WITH POSITIVE RESULTS.

BACTERIOLOGY

Standard Plate Count

Standard Plate Count is a test used to supplement routine analysis for Coliform bacteria. The limit for Standard Plate Count (at 35°C after 48 hours) in the ODWOs is 500 organisms per mL (based on a geometric mean of 5 or more samples). One treated water sample and three samples from each distribution location were above the ODWO.

INORGANIC AND PHYSICAL PARAMETERS

NITRATE

The ODWO of 10.0 mg/L for Total Nitrates was exceeded in both the treated and distributed waters samples in February, April and June. The District Officer was notified.

Ammonia

The Total Ammonium level for the March treated water sample is high. While the European Economic Community has an aesthetic guideline of .05 mg/L, the Maximum Admissible Concentration is .50 mg/L and is set as a result of the concern for potential sewage pollution and its detection.

TURBIDITY

The ODWO of 1.0 Formazin Turbidity Unit (FTU) was exceeded in the January and February treated water samples as reported by the laboratory turbidity values. The field turbidity result for January supported the laboratory result but the February value did not. Protocol for turbidity states that measurements should be made within 48 hours. This is not always achieved except when measured in the field, the field turbidity values are therefore considered the more reliable. The District Officer was notified for the January results.

COLOUR

The aesthetic ODWO of 5.0 True Colour Units (TCU) was exceeded six times in treated water and thirteen times in both distribution locations.

HARDNESS

The aesthetic ODWO indicates that a hardness level of between 80 and 100 mg/L, as the equivalent quantity of calcium carbonate, is

appropriate and water supplies with a hardness greater than 200 mg/L are considered poor. Hardness values in the Dresden supply ranged from 221 - 405 mg/L as Calcium Carbonate.

Other parameters associated with hardness, calcium and conductivity were also above their respective aesthetic limits.

ALUMINUM

The plant operational guideline of 100 µg/L as Al in the water leaving the plant was exceeded seven times in the treated water.

ORGANIC PARAMETERS

ATRAZINE

Atrazine was detected positive levels in four treated water samples and in five distribution samples. Atrazine values ranged to a maximum of 3,320 ng/L in the distributed water. Health and Welfare Canada has an interim Maximum Acceptable Concentration (IMAC) for Atrazine in drinking water of 60,000 ng/L.

CYANAZINE

Cyanazine (Bladex) was detected at positive levels in June at all sample locations with reported values ranging from 1,420 ng/L to 2,230 ng/L. Health and Welfare Canada has an interim Maximum Acceptable Concentration (IMAC) for Cyanazine in drinking water of 10,000 ng/L.

METOLACHLOR

Metolachlor was detected at positive levels in June at all sample locations. Reported values ranged from 4,480 ng/L to 6,200 ng/L. Health and Welfare Canada has an interim Maximum Acceptable Concentration (IMAC) for Metolachlor in drinking water of 50,000 ng/L.

TRIHALOMETHANES

Trihalomethanes (THMs) are acknowledged to be produced during the water treatment process and will always occur in chlorinated surface waters. THMs are comprised of Chloroform, Chlorodibromomethane and Dichlorobromomethane. Bromoform occurs occasionally. Results are reported for the individual compounds as well as for total THMs. All Total THM occurrences in the treated and distributed samples ranging from 11.1 µg/L to 141.4 µg/L, were well below the ODWO of 350 µg/L.

CONCLUSIONS

Health related ODWO guidelines were exceeded in 1989 for two parameters. Total nitrate values were above the guideline in the treated and distributed water samples on three occasions. The ODWO for turbidity was exceeded in one treated water sample.

The results listed in this report for 1989 are consistent with results reported for previous years.

As was determined in 1986, 1987 and 1988 more pesticides were detected at this supply than at any other supply included in DWSP, which is indicative of the agricultural nature of the watershed. None of the reported pesticides measured on DWSP exceeded any drinking water guidelines.

Although the overall treatment process is efficient and produces a good quality water, a review of the results indicate that the raw water source, adversely impacted by agricultural runoff from the watershed, is often of poor quality and this is reflected in the treated water.

RECOMMENDATIONS

One recommendation can be made:

1. A higher dosage of powder activated carbon, during those months when pesticides are at their highest in the raw water, may promote a greater reduction in levels in the treated water.

TABLE 3

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP SAMPLE DAY CONDITIONS FOR 1989

	SAMPLE DAY CONDITIONS		TREATMENT CHEMICAL DOSAGES (MG/L)					
			COAGULATION	COAGULATION AID	TASTE & ODOUR	POST PH ADJUSTMEN	POST-CHLORINATION	ACTIVATION
			ALUM DRY	SODIUM SILICATE	POTASSIUM PERMANGANATE	CALCIUM CARBONATE	CHLORINE	SODIUM BICARBONATE
DATE	DELAY* TIME(HRS)	FLOW (1000M3)						
JAN 03	.0	3.6	24.60	4.34	.11	.	1.09	3.74
JAN 10	2.0	4.0	50.29	6.16	.25	12.32	1.12	5.31
FEB 14	.5	3.7	.84	2.91	.12	.	1.85	2.51
MAR 14	.5	.0	1.20	.90	.10	.	.	.80

* THE DELAY TIME BETWEEN THE RAW AND TREATED WATER SAMPLING, SHOULD ESTIMATE THE RETENTION TIME.

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	RAW			TREATED			SITE 1			SITE 2		
		TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
BACTERIOLOGICAL	FECAL COLIFORM MF	13	13	0	.	.	.	.	.	.	.	.	.
	STANDRD PLATE CNT MF	.	.	.	12	8	0	12	9	0	9	7	0
	TOTAL COLIFORM MF	13	11	0	12	1	0	12	1	0	9	2	0
	T COLIFORM BCKGRD MF	13	13	0	12	2	0	12	4	0	9	4	0
*TOTAL SCAN BACTERIOLOGICAL		39	37	0	36	11	0	36	14	0	27	13	0
*TOTAL GROUP BACTERIOLOGICAL		39	37	0	36	11	0	36	14	0	27	13	0
CHEMISTRY (FLD)	FLD CHLORINE (COMB)	.	.	.	9	8	0	19	17	0	14	13	0
	FLD CHLORINE FREE	.	.	.	9	9	0	20	19	0	13	12	0
	FLD CHLORINE (TOTAL)	.	.	.	9	9	0	20	19	0	14	14	0
	FLD PH	9	9	0	9	9	0	19	19	0	14	14	0
	FLD TEMPERATURE	9	9	0	9	9	0	19	19	0	14	14	0
	FLD TURBIDITY	9	9	0	9	9	0	16	16	0	11	11	0
*TOTAL SCAN CHEMISTRY (FLD)		27	27	0	54	53	0	113	109	0	80	78	0
CHEMISTRY (LAB)	ALKALINITY	13	13	0	13	13	0	24	24	0	17	17	0
	CALCIUM	13	13	0	13	13	0	24	24	0	17	17	0
	CYANIDE	13	0	0	13	0	0	12	0	1	9	0	0
	CHLORIDE	13	13	0	13	13	0	24	24	0	17	17	0
	COLOUR	13	12	1	13	12	1	24	22	2	17	16	1
	CONDUCTIVITY	13	13	0	13	13	0	24	24	0	17	17	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE
CHEMISTRY (LAB)	FLUORIDE	13	13	0	13	13	0	24	22	0	17	15	1
	HARDNESS	13	13	0	13	13	0	24	24	0	17	17	0
	IONCAL	13	13	0	13	13	0	24	24	0	18	17	0
	LANGELIERS INDEX	13	13	0	13	13	0	24	24	0	17	17	0
	MAGNESIUM	13	13	0	13	13	0	24	24	0	17	17	0
	SODIUM	13	13	0	13	13	0	24	24	0	17	17	0
	AMMONIUM TOTAL	13	10	2	13	2	8	24	7	11	17	8	5
	NITRITE	13	13	0	13	2	8	24	5	18	17	4	13
	TOTAL NITRATES	13	13	0	13	13	0	24	24	0	17	17	0
	NITROGEN TOT KJELD	13	13	0	13	13	0	24	24	0	17	17	0
	PH	13	13	0	13	13	0	24	24	0	17	17	0
	PHOSPHORUS FIL REACT	13	12	1	13	4	8	.	.	.	.	.	.
	PHOSPHORUS TOTAL	13	13	0	13	7	6	.	.	.	.	.	.
	SULPHATE	13	13	0	13	13	0	24	24	0	17	17	0
	TURBIDITY	13	13	0	13	13	0	24	24	0	17	17	0
*TOTAL SCAN CHEMISTRY (LAB)		273	255	4	273	222	31	444	392	32	316	281	20
METALS	SILVER	13	0	3	13	0	2	24	0	4	17	0	4
	ALUMINUM	13	13	0	13	13	0	24	24	0	17	17	0
	ARSENIC	13	9	4	13	5	8	24	12	12	17	5	12
	BARIUM	13	13	0	13	13	0	24	24	0	17	17	0
	BORON	13	13	0	13	13	0	24	24	0	17	17	0
	BERYLLIUM	13	0	12	13	0	8	24	2	16	17	0	11

TABLE 4

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SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE
METALS	CADMIUM	13	0	8	13	0	5	24	0	9	17	0	5
	COBALT	13	1	12	13	0	11	24	0	19	17	0	14
	CHROMIUM	13	10	1	13	7	4	24	20	0	17	10	3
	COPPER	13	12	1	13	12	1	24	23	1	17	17	0
	IRON	13	13	0	13	0	5	24	0	8	17	6	11
	MERCURY	12	2	9	12	2	9	12	0	10	9	1	7
	MANGANESE	13	13	0	13	13	0	24	24	0	17	17	0
	MOLYBDENUM	13	12	1	13	13	0	24	24	0	17	17	0
	NICKEL	13	3	5	13	1	9	24	6	15	17	9	7
	LEAD	13	12	1	13	7	5	24	21	3	17	17	0
	ANTIMONY	13	11	2	13	13	0	24	22	2	17	15	2
	SELENIUM	13	0	10	13	2	10	24	5	18	17	2	14
	STRONTIUM	13	13	0	13	13	0	24	24	0	17	17	0
	TITANIUM	13	13	0	13	13	0	24	24	0	17	17	0
	THALLIUM	13	0	8	13	0	6	24	0	8	17	0	8
	URANIUM	13	13	0	13	13	0	24	24	0	17	17	0
	VANADIUM	13	13	0	13	6	7	24	15	9	17	7	10
	ZINC	13	13	0	13	13	0	24	24	0	17	17	0
*TOTAL SCAN METALS		311	202	77	311	172	90	564	342	134	400	242	108
*TOTAL GROUP INORGANIC & PHYSICAL		611	484	81	638	447	121	1121	843	166	796	601	128
CHLOROAROMATICS	HEXACHLOROBUTADIENE	13	0	0	11	0	0	12	0	0	9	0	0
	123 TRICHLOROBENZENE	13	0	0	11	0	0	12	0	0	9	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE
CHLOROAROMATICS	1234 T-CHLOROBENZENE	13	0	0	11	0	0	12	0	0	9	0	0
	1235 T-CHLOROBENZENE	13	0	0	11	0	0	12	0	0	9	0	0
	124 TRICHLOROBENZENE	13	0	0	11	0	0	12	0	0	9	0	0
	1245 T-CHLOROBENZENE	13	0	0	11	0	0	12	0	0	9	0	0
	135 TRICHLOROBENZENE	13	0	0	11	0	0	12	0	0	9	0	0
	HCB	13	0	0	11	0	0	12	0	0	9	0	0
	HEXACHLOROETHANE	12	0	0	10	0	0	12	0	0	9	0	0
	OCTACHLOROSTYRENE	13	0	0	11	0	0	12	0	0	8	0	0
	PENTACHLOROBENZENE	13	0	0	11	0	0	12	0	0	9	0	0
	236 TRICHLOROTOLUENE	13	0	0	11	0	0	12	0	0	9	0	0
	245 TRICHLOROTOLUENE	13	0	0	11	0	0	12	0	0	9	0	0
	26A TRICHLOROTOLUENE	13	0	0	11	0	0	12	0	0	9	0	0
*TOTAL SCAN CHLOROAROMATICS		181	0	0	153	0	0	168	0	0	125	0	0
CHLOROPHENOLS	234 TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.
	2345 T-CHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.
	2356 T-CHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.
	245-TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.
	246-TRICHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.
	PENTACHLOROPHENOL	2	0	0	2	0	0	.	.	.	.	.	.
*TOTAL SCAN CHLOROPHENOLS		12	0	0	12	0	0	0	0	0	0	0	0

TABLE 4

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SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE
PAH	PHENANTHRENE	13	0	0	13	0	0	.	.	.	.	.	.
	ANTHRACENE	12	0	0	12	0	0	.	.	.	.	.	.
	FLUORANTHENE	13	0	0	13	0	0	.	.	.	.	.	.
	PYRENE	13	0	0	13	0	0	.	.	.	.	.	.
	BENZO(A)ANTHRACENE	13	0	0	13	0	0	.	.	.	.	.	.
	CHRYSENE	13	0	0	13	0	0	.	.	.	.	.	.
	DIMETH. BENZ(A)ANTHR	8	0	0	8	0	0	.	.	.	.	.	.
	BENZO(E) PYRENE	13	0	0	13	0	0	.	.	.	.	.	.
	BENZO(B) FLUORANTHEN	13	0	0	13	0	0	.	.	.	.	.	.
	PERYLENE	13	0	0	13	0	0	.	.	.	.	.	.
	BENZO(K) FLUORANTHEN	13	0	0	13	0	0	.	.	.	.	.	.
	BENZO(A) PYRENE	7	0	0	7	0	0	.	.	.	.	.	.
	BENZO(G,H,I) PERYLEN	13	0	0	13	0	0	.	.	.	.	.	.
	DIBENZO(A,H) ANTHRAC	13	0	0	13	0	0	.	.	.	.	.	.
	INDENO(1,2,3-C,D) PY	13	0	0	13	0	0	.	.	.	.	.	.
	BENZO(B) CHRYSENE	13	0	0	13	0	0	.	.	.	.	.	.
	CORONENE	13	0	0	13	0	0	.	.	.	.	.	.
*TOTAL SCAN PAH		209	0	0	209	0	0	0	0	0	0	0	0
PESTICIDES & PCB	ALDRIN	13	0	0	11	0	0	12	0	0	9	0	0
	ALPHA BHC	13	0	2	11	0	2	12	0	2	9	0	2
	BETA BHC	13	0	0	11	0	0	12	0	0	9	0	0
	LINDANE	13	0	2	11	0	2	12	0	2	9	0	1

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN

SUMMARY TABLE OF RESULTS (1989)

		SITE											
		RAW			TREATED			SITE 1			SITE 2		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
PESTICIDES & PCB	ALPHA CHLORDANE	13	0	0	11	0	0	12	0	0	9	0	0
	GAMMA CHLORDANE	13	0	0	11	0	0	12	0	0	9	0	0
	DIELDRIN	13	0	0	11	0	0	12	0	0	9	0	0
	METHOXYCHLOR	13	0	0	11	0	0	12	0	0	9	0	0
	ENDOSULFAN 1	13	0	0	11	0	0	12	0	0	9	0	0
	ENDOSULFAN II	13	0	0	11	0	0	12	0	0	9	0	0
	ENDRIN	13	0	0	11	0	0	12	0	0	9	0	0
	ENDOSULFAN SULPHATE	13	0	0	11	0	0	12	0	0	9	0	0
	HEPTACHLOR EPOXIDE	13	0	0	11	0	0	12	0	0	9	0	0
	HEPTACHLOR	13	0	0	11	0	0	12	0	0	9	0	0
	MIREX	13	0	0	11	0	0	12	0	0	9	0	0
	OXYCHLORDANE	13	0	0	11	0	0	12	0	0	9	0	0
	OPDDT	13	0	0	11	0	0	12	0	0	9	0	0
	PCB	13	0	0	11	0	0	12	0	0	9	0	0
	DDD	13	0	0	11	0	0	12	0	0	9	0	0
	PPDDE	13	0	0	11	0	0	12	0	0	9	0	0
	PPDDT	13	0	0	11	0	0	12	0	0	9	0	0
	AMETRINE	13	0	0	13	0	0	6	0	0	5	0	0
	ATRAZINE	13	5	5	13	5	3	6	3	1	5	2	1
	ATRATONE	13	0	0	13	0	0	6	0	0	5	0	0
	CYANAZINE (BLADEX)	13	1	0	13	1	0	6	1	0	5	1	0
	D-ETHYL ATRAZINE	13	0	5	13	0	5	6	0	3	5	0	2
	D-ETHYL SIMAZINE	13	0	0	13	0	0	6	0	0	5	0	0
	PROMETONE	13	0	0	13	0	0	6	0	0	5	0	0
	PROPAZINE	13	0	1	13	0	0	6	0	0	5	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE
PESTICIDES & PCB	PROMETRYNE	13	0	0	13	0	0	6	0	0	5	0	0
	METRIBUZIN (SENCOR)	13	0	0	13	0	0	6	0	0	5	0	0
	SIMAZINE	13	1	0	13	1	0	6	0	0	5	0	0
	ALACHLOR (LASSO)	13	0	0	13	0	0	6	0	0	5	0	0
	METOLACHLOR	13	1	0	13	1	1	6	0	1	5	1	0
*TOTAL SCAN PESTICIDES & PCB		442	8	15	400	8	13	330	4	9	254	4	6
PHENOLICS	PHENOLICS	13	12	1	13	12	1	.	.	.	.	.	.
*TOTAL SCAN PHENOLICS		13	12	1	13	12	1	0	0	0	0	0	0
SPECIFIC PESTICIDES	TOXAPHENE	12	0	0	10	0	0	12	0	0	9	0	0
	2,4,5-T	2	0	0	2	0	0	.	.	.	.	.	.
	2,4-D	2	0	0	2	0	0	.	.	.	.	.	.
	2,4-DB	2	0	0	2	0	0	.	.	.	.	.	.
	2,4 D PROPIONIC ACID	1	0	0	1	0	0	.	.	.	.	.	.
	DICAMBA	2	0	0	2	0	0	.	.	.	.	.	.
	PICHLORAM	0	0	0	0	0	0	.	.	.	.	.	.
	SILVEX	2	0	0	2	0	0	.	.	.	.	.	.
	DIAZINON	2	0	0	2	0	0	.	.	.	.	.	.
	DICHLOROVOS	2	0	0	2	0	0	.	.	.	.	.	.
	CHLORPYRIFOS	2	0	0	2	0	0	.	.	.	.	.	.

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN

SUMMARY TABLE OF RESULTS (1989)

		SITE											
		RAW			TREATED			SITE 1			SITE 2		
SCAN	PARAMETER	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE	TOTAL	POSITIVE	TRACE
SPECIFIC PESTICIDES	ETHION	2	0	0	2	0	0	.	.	.	.	.	.
	AZINPHOS-METHYL	0	0	0	0	0	0	.	.	.	.	.	.
	MALATHION	2	0	0	2	0	0	.	.	.	.	.	.
	MEVINPHOS	2	0	0	2	0	0	.	.	.	.	.	.
	METHYL PARATHION	2	0	0	2	0	0	.	.	.	.	.	.
	METHYLTRITHION	2	0	0	2	0	0	.	.	.	.	.	.
	PARATHION	2	0	0	2	0	0	.	.	.	.	.	.
	PHORATE	2	0	0	2	0	0	.	.	.	.	.	.
	RELDAN	2	0	0	2	0	0	.	.	.	.	.	.
	RONNEL	2	0	0	2	0	0	.	.	.	.	.	.
	AMINOCARB	0	0	0	0	0	0	.	.	.	.	.	.
	BENOMYL	1	0	0	1	0	0	.	.	.	.	.	.
	BUX	0	0	0	0	0	0	.	.	.	.	.	.
	CARBOFURAN	2	0	0	2	0	0	.	.	.	.	.	.
	CICP	2	0	0	2	0	0	.	.	.	.	.	.
	DIALLATE	2	0	0	2	0	0	.	.	.	.	.	.
	EPTAM	2	0	0	2	0	0	.	.	.	.	.	.
	IPC	2	0	0	2	0	0	.	.	.	.	.	.
	PROPOXUR	2	0	0	2	0	0	.	.	.	.	.	.
	CARBARYL	2	0	1	2	0	1	.	.	.	.	.	.
	BUTYLATE	2	0	0	2	0	0	.	.	.	.	.	.
*TOTAL SCAN SPECIFIC PESTICIDES		64	0	1	62	0	1	12	0	0	9	0	0
VOLATILES	BENZENE	13	0	0	13	0	0	12	0	1	9	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE
VOLATILES	TOLUENE	13	0	6	13	0	5	12	0	5	9	0	4
	ETHYLBENZENE	13	0	5	13	0	4	12	0	4	9	0	3
	P-XYLENE	13	0	0	13	0	0	12	0	0	9	0	0
	M-XYLENE	13	0	2	13	0	0	12	0	1	9	0	0
	O-XYLENE	13	0	1	13	0	1	12	0	1	9	0	0
	STYRENE	13	1	6	13	0	12	12	0	9	9	0	6
	1,1 DICHLOROETHYLENE	13	0	0	13	0	0	12	0	0	9	0	0
	METHYLENE CHLORIDE	13	0	0	13	0	0	12	0	0	9	0	0
	T1,2DICHLOROETHYLENE	13	0	0	13	0	0	12	0	0	9	0	0
	1,1 DICHLOROETHANE	13	0	0	13	0	0	12	0	0	9	0	0
	CHLOROFORM	13	0	3	13	13	0	12	12	0	9	9	0
	111, TRICHLOROETHANE	13	0	2	13	0	0	12	0	0	9	0	1
	1,2 DICHLOROETHANE	13	0	0	13	0	0	12	0	0	9	0	0
	CARBON TETRACHLORIDE	13	0	0	13	0	0	12	0	0	9	0	0
	1,2 DICHLOROPROPANE	13	0	0	13	0	0	12	0	0	9	0	0
	TRICHLOROETHYLENE	13	0	0	13	0	0	12	0	0	9	0	0
	DICHLOROBROMOMETHANE	13	0	0	13	13	0	12	12	0	9	9	0
	112 TRICHLOROETHANE	13	0	0	13	0	0	12	0	0	9	0	0
	CHLORODIBROMOMETHANE	13	0	0	13	12	0	12	11	1	9	8	1
	T-CHLOROETHYLENE	13	0	0	13	0	2	12	0	3	9	0	1
	BROMOFORM	13	0	0	13	0	5	12	0	5	9	0	3
	1122 T-CHLOROETHANE	13	0	0	13	0	0	12	0	0	9	0	0
	CHLOROBENZENE	13	0	0	13	0	0	12	0	0	9	0	0
	1,4 DICHLOROBENZENE	13	0	0	13	0	0	12	0	0	9	0	0
	1,3 DICHLOROBENZENE	13	0	0	13	0	0	12	0	0	9	0	0

TABLE 4

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN

SUMMARY TABLE OF RESULTS (1989)

SCAN	PARAMETER	SITE RAW TOTAL	RAW POSITIVE	RAW TRACE	TREATED TOTAL	TREATED POSITIVE	TREATED TRACE	SITE 1 TOTAL	SITE 1 POSITIVE	SITE 1 TRACE	SITE 2 TOTAL	SITE 2 POSITIVE	SITE 2 TRACE
VOLATILES	1,2 DICHLOROBENZENE	13	0	0	13	0	0	12	0	0	9	0	0
	ETHLYENE DIBROMIDE	13	0	0	13	0	0	12	0	0	9	0	0
	TOTL TRIHALOMETHANES	13	0	0	13	13	0	12	12	0	9	9	0
*TOTAL SCAN VOLATILES		377	1	25	377	51	29	348	47	30	261	35	19
*TOTAL GROUP ORGANIC		1298	21	42	1226	71	44	858	51	39	649	39	25
TOTAL		1948	542	123	1900	529	165	2015	908	205	1472	653	153

KEY TO TABLE 5 and 6

A ONTARIO DRINKING WATER OBJECTIVES (ODWO)

1. Maximum Acceptable Concentration (MAC)

1+. MAC for Total Trihalomethanes

1*. MAC for Bacteriological Analyses
Poor water quality is indicated when :
- total coliform counts > 0 < 5
- P/A Bottle Test is present after 48 hours
- Aeromonas organisms are detected in more than 25% of samples in a single submission or in successive submissions from the same sampling site
- Pseudomonas Aeruginosa, Staphylococcus Aureus and members of the Fecal Streptococcus group should not be detected in any sample
- Standard Plate Count should not exceed 500 organisms per ml at 35 ^{0}C within 48 hours

2. Interim Maximum Acceptable Concentration (IMAC)
3. Maximum Desirable Concentration (MDC)
4. Aesthetic or Recommended Operational Guideline
- hardness levels between 80 and 100 mg/L as calcium carbonate are considered to provide an acceptable balance between corrosion and incrustation, water supplies with a hardness >200 mg/L are considered poor and those in excess of 500 mg/L are unacceptable.

B HEALTH & WELFARE CANADA (H&W)

1. Maximum Acceptable Concentration (MAC)
2. Proposed MAC
3. Interim MAC
4. Aesthetic Objective (AO) (for xylenes, a total)

C WORLD HEALTH ORGANIZATION (WHO)

1. Guideline Value (GV)
2. Tentative GV
3. Aesthetic GV

D US ENVIRONMENTAL PROTECTION AGENCY (EPA)

1. Maximum Contaminant Level (MCL)
2. Suggested No-Adverse Effect Level (SNAEL)
3. Lifetime Health Advisory
4. EPA Ambient Water Quality Criteria
5. Maximum Contaminant Level Goal (MCLG)

F EUROPEAN ECONOMIC COMMUNITY (EEC)

1. Health Related Guideline Level
2. Aesthetic Guideline Level
3. Maximum Admissable Concentration (MADC)

G CALIFORNIA STATE DEPARTMENT OF HEALTH-GUIDELINE VALUE

H USSR MAXIMUM PERMISSIBLE CONCENTRATION

I NEW YORK STATE AMBIENT WATER GUIDELINE

N/A NONE AVAILABLE

INTERPRETATION OF DATA

The interpretation of analytical results that are obtained from measurements near the limit of detection of the measurement process is subject to greater uncertainty than those at higher concentrations. The principle areas of concern relate to whether the substance has actually been detected, whether it has been properly identified, and whether it is an artifact of the measurement process. In other words, false positives can be caused by the instrumentation or the test procedures used, when in fact these compounds are not present in the sample.

There are several methods to treat data from such measurements:
1. Exclude the low-level data because of this uncertainty factor. Studies of long-term environmental trends and modelling may however, be adversely affected by the exclusion of such data.
2. Qualify these data so the user is aware of the greater uncertainty associated with their use.

For the Drinking Water Surveillance Program, measurements near the limit of detection of the measurement process are reported with the code "<T". Results qualified by "W" indicate a zero measurement. These results are reported for purposes of modelling and long-term trend analysis and no significance should be attributed to a single determination of a substance below "T" (a single determination may well be a false positive). Repeat analysis or additional data are needed before it can be stated with certainty that the substance in question was truly present. On the other hand, it is less likely that repeated detection of a substance at or near the limit of detection at a specific location is solely due to an artifact in the measurement system, and more likely represents a true positive. The average of such data however, is still only an estimate of the amount of substance present subject to the possible biases of the method used.

LABORATORY RESULTS, REMARK DESCRIPTIONS

.	No Sample Taken
BDL	Below Minimum Measurable Amount
<T	Greater Than Detection Limit But Not Confident (SEE INTERPRETATION OF RESULTS ABOVE)
>	Results Are Greater Than The Upper Limit
<=>	Approximate Result
!CS	No Data: Contamination Suspected
!IL	No Data: Sample Incorrectly Labelled
!IS	No Data: Insufficient Sample
!IV	No Data: Inverted Septum
!LA	No Data: Laboratory Accident
!LD	No Data: Test Queued After Sample Discarded

!LA	No Data: Laboratory Accident
!LD	No Data: Test Queued After Sample Discarded
!NA	No Data: No Authorization To Perform Reanalysis
!NP	No Data: No Procedure
!NR	No Data: Sample Not Received
!OP	No Data: Obscured Plate
!QU	No Data: Quality Control Unacceptable
!PE	No Data: Procedural Error - Sample Discarded
!PH	No Data: Sample pH Outside Valid Range
!RE	No Data: Received Empty
!RO	No Data: See Attached Report (no numeric results)
!SM	No Data: Sample Missing
!SS	No Data: Send Separate Sample Properly Preserved
!UI	No Data: Indeterminant Interference
!TX	No Data: Time Expired
A3C	Approximate, Total Count Exceeded 300 Colonies
APL	Additional Peak, Large, Not Priority Pollutant
APS	Additional Peak, Less Than, Not Priority Pollutant
CIC	Possible Contamination, Improper Cap
CRO	Calculated Result Only
PPS	Test Performed On Preserved Sample
RMP	P and M-Xylene Not Separated
RRV	Rerun Verification
RVU	Reported Value Unusual
SPS	Several Peaks, Small, Not Priority Pollutant
UCR	Unreliable: Could Not Confirm By Reanalysis
UCS	Unreliable: Contamination Suspected
UIN	Unreliable: Indeterminant Interference
XP	Positive After X Number of Hours
T# (T06)	Result Taken After # Hours

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
BACTERIOLOGICAL						
FECAL COLIFORM MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = 0 (A1)	
JAN	180 T24	.	.	.	.	.
	1340 T24	.	.	.	.	.
FEB	24 T24	.	.	.	.	.
MAR	2 R72	.	.	.	.	.
APR	60 T24	.	.	.	.	.
MAY	36	.	.	.	.	.
JUN	288	.	.	.	.	.
JUL	40	.	.	.	.	.
AUG	4	.	.	.	.	.
SEP	26 A3C	.	.	.	.	.
OCT	298	.	.	.	.	.
NOV	20	.	.	.	.	.
DEC	50	.	.	.	.	.
STANDRD PLATE CNT MF ( )			DET'N LIMIT = 0		GUIDELINE = 500/ML (A1)	
JAN	.	30 T24	.	.	.	.
	.	6 <=>	.	7 <=>	.	10 T48
FEB	.	.	.	20 T24	.	12 T24
MAR	.	135 T48	.	59 T24	.	51 T24
APR	.	0 <=>	.	8 <=>	.	590 T24
MAY	.	38	.	59	.	.
JUN	.	12	.	187	.	290
JUL	.	14	.	2400 >	.	.
AUG	.	1100	.	730	.	2400 >
SEP	.	210	.	11000	.	.
OCT	.	3 <=>	.	67	.	BDL
NOV	.	10	.	59	.	2400 >
DEC	.	7 <=>	.	2 <=>	.	3 <=>
TOTAL COLIFORM MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = 5/100ML(A1)	
JAN	36000 A3C	0 T24	.	.	.	.
	80000 R48	0 T24	.	0 T48	.	0 T48
FEB	2400 T24	.	.	0 T24	.	0 T24
MAR	5400 A3C	2 T48	.	1 T24	.	0 T24
APR	4400 T24	0 T24	.	0 T24	.	0 T24
MAY	2400	0	.	0	.	.
JUN	2700 A3C	0	.	0	.	1 A3C
JUL	400 A3C	0	.	0 A3C	.	.
AUG	200 <=>	0	.	0 A3C	.	0
SEP	BDL	0	.	0	.	.
OCT	4200 A3C	0	.	0	.	0
NOV	3600 A3C	0	.	0	.	1 A3C
DEC	3800	0	.	0	.	0
T COLIFORM BCKGRD MF (CT/100ML)			DET'N LIMIT = 0		GUIDELINE = N/A	
JAN	40000 T24	0 T24	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT				DISTRIBUTION SYSTEM	
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	20000 R48	0 T24	.	0 T48	.	0 T48
FEB	7300 T24	.	.	0 T24	.	5 T24
MAR	41000 A3C	8 T48	.	0 T24	.	0 T24
APR	22200 T24	0 T24	.	0 T24	.	0 T24
MAY	20500	0	.	0	.	.
JUN	80000 A3C	11	.	46	.	2400 >
JUL	24800 A3C	0	.	2400 >	.	.
AUG	14000	0	.	2400 >	.	0
SEP	50000	0	.	0	.	.
OCT	73000 A3C	0	.	1	.	4
NOV	16000 A3C	0	.	0	.	2400 >
DEC	20000	0	.	0	.	0

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
CHEMISTRY (FLD)						
FLD CHLORINE (COMB) ( )			DET'N LIMIT = N/A		GUIDELINE = N/A	
JAN	.	.300	.	.	.	.
	.	.400	.050	.150	.100	.100
FEB	.	.300	.200	.400	.200	.100
MAR	.	.900	.020	.700	.900	.410
MAY	.	.	.100	.	.	.
JUN	.	.000	.000	.000	.100	.000
AUG	.	.050	.050	.240	.200	.300
SEP	.	.300	.050	.050	.	.
OCT	.	.	.050	.200	.	.
NOV	.	.500	.050	.300	.100	.200
DEC	.	1.400	.100	.400	.200	.200
FLD CHLORINE FREE ( )			DET'N LIMIT = N/A		GUIDELINE = N/A	
JAN	.	.600	.	.	.	.
	.	.600	.100	.150	.	.100
FEB	.	.900	.100	.300	.200	.100
MAR	.	.200	.080	.100	.100	.090
MAY	.	.	.100	.100	.	.
JUN	.	1.000	.000	.100	.100	.100
AUG	.	.200	.100	.010	.100	.200
SEP	.	1.000	.050	.100	.	.
OCT	.	.	.050	.050	.	.
NOV	.	1.200	.100	.150	.100	.100
DEC	.	.100	.100	.600	.000	.100
FLD CHLORINE (TOTAL) ( )			DET'N LIMIT = N/A		GUIDELINE = N/A	
JAN	.	.900	.	.	.	.
	.	1.000	.150	.300	.100	.200
FEB	.	1.200	.300	.700	.400	.200
MAR	.	1.100	.100	.900	1.000	.500
MAY	.	.	.200	.300	.	.
JUN	.	1.000	.000	.100	.200	.100
AUG	.	.250	.150	.250	.300	.500
SEP	.	1.300	.100	.150	.	.
OCT	.	.	.100	.250	.	.
NOV	.	1.700	.150	.450	.200	.300
DEC	.	1.500	.200	1.000	.200	.300
FLD PH (DIMSLESS)			DET'N LIMIT = N/A		GUIDELINE = 6.5-8.5(A4)	
JAN	7.700	7.100	.	.	.	.
	7.900	7.300	7.300	7.100	7.100	7.100
FEB	8.000	7.900	8.000	7.600	7.800	7.800
MAR	7.900	8.100	8.000	8.100	8.000	8.000
MAY	.	.	7.800	8.000	.	.
JUN	8.000	7.500	7.600	7.500	7.100	7.200

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
AUG	7.800	7.500	7.600	8.000	7.600	7.500
SEP	7.900	7.500	7.500	7.500	.	.
OCT	.	.	7.600	7.600	.	.
NOV	8.000	7.700	7.600	.	7.500	7.500
DEC	7.900	7.400	7.600	7.500	7.400	7.700
FLD TEMPERATURE (DEG.C)			DET'N LIMIT = N/A		GUIDELINE = 15 (A1)	
JAN	1.500	2.000	.	.	.	.
	2.000	1.000	18.000	5.000	.500	.600
FEB	2.000	2.000	18.000	5.000	4.000	5.000
MAR	1.000	3.000	20.000	5.000	10.000	3.000
MAY	.	.	20.000	12.000	.	.
JUN	19.000	20.000	21.000	18.000	15.000	17.000
AUG	23.000	24.000	22.500	23.000	21.000	19.500
SEP	23.000	23.000	22.000	22.000	.	.
OCT	.	.	22.500	22.000	.	.
NOV	7.000	7.000	19.500	11.000	13.000	12.000
DEC	2.500	3.000	7.000	.	7.000	8.000
FLD TURBIDITY (FTU)			DET'N LIMIT = N/A		GUIDELINE = 1.0 (A1)	
JAN	26.000	1.020	.	.	.	.
	330.000	.330	.230	.200	.340	.310
FEB	8.300	.150	.290	.190	.280	.310
MAR	21.000	.410	.330	.240	.	.900
JUN	90.000	.250	.340	.250	.500	.360
AUG	18.000	.400	.390	.590	.720	.700
SEP	105.000	.790	.600	.620	.	.
OCT	.	.	.820	.380	.	.
NOV	87.000	.730	.	.	.	.
DEC	14.000	.500	.800	.620	.960	.400

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
CHEMISTRY (LAB)						
ALKALINITY (MG/L)			DET'N LIMIT = .200		GUIDELINE = 30-500 (A4)	
JAN	173.300	132.900	.	.	.	.
	173.300	142.100	154.700	158.600	152.700	154.700
FEB	245.300	241.000	235.800	238.000	237.800	234.800
MAR	139.600	151.300	155.600	159.300	.	168.000
APR	198.000	186.200	185.500	181.600	182.000	180.300
MAY	199.500	207.100	202.200	201.100	.	.
JUN	179.900	167.500	178.500	185.000	175.000	176.500
JUL	199.300	192.400	189.700	188.100	.	.
AUG	154.700	157.700	155.900	159.900	155.900	157.200
SEP	168.600	162.200	159.600	161.000	.	.
OCT	202.700	188.600	188.800	187.300	189.600	187.100
NOV	193.000	178.600	193.800	179.600	193.600	192.400
DEC	255.000	254.700	249.600	245.900	252.700	245.900
CALCIUM (MG/L)			DET'N LIMIT = .100		GUIDELINE = 100 (F2)	
JAN	93.600	90.400	.	.	.	.
	85.400	88.000	93.000	92.800	91.200	94.400
FEB	121.000	120.000	117.000	118.000	115.000	123.000
MAR	65.400	70.000	72.600	75.400	.	79.800
APR	104.000	103.000	102.000	102.000	100.000	101.000
MAY	100.000	99.000	96.600	95.400	.	.
JUN	99.200	92.800	101.000	104.000	97.600	101.000
JUL	89.800	87.400	88.000	88.400	.	.
AUG	67.600	69.600	69.600	70.600	69.600	70.000
SEP	63.600	62.600	63.200	63.600	.	.
OCT	84.200	81.400	81.400	79.300	81.200	80.900
NOV	96.400	96.400	97.400	98.400	96.200	97.000
DEC	129.000	126.000	126.000	125.000	127.000	125.000
CYANIDE (MG/L)			DET'N LIMIT = 0.001		GUIDELINE = .200 (A1)	
JAN	BDL	BDL	.	.	.	.
	BDL	BDL	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MAR	BDL	BDL	.	BDL	.	BDL
APR	BDL	BDL	.	.005 <T	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.
AUG	BDL	BDL	.	BDL	.	BDL
SEP	BDL	BDL	.	BDL	.	.
OCT	BDL	BDL	.	BDL	.	BDL
NOV	BDL	BDL	.	BDL	.	BDL
DEC	BDL	BDL	.	BDL	.	BDL
CHLORIDE (MG/L)			DET'N LIMIT = .200		GUIDELINE = 250 (A3)	
JAN	29.400	32.100	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	27.100	27.900	28.400	30.400	28.300	29.200
FEB	33.100	35.000	35.100	35.300	35.600	35.000
MAR	45.500	50.200	46.100	45.800	.	41.300
APR	30.500	32.900	32.400	32.200	32.700	32.000
MAY	30.600	32.100	32.700	32.500	.	.
JUN	28.600	30.600	34.000	35.400	32.800	33.000
JUL	33.500	36.300	36.000	35.800	.	.
AUG	28.400	32.200	33.700	34.800	33.000	32.300
SEP	27.000	29.400	29.700	30.400	.	.
OCT	36.600	38.700	38.900	37.600	38.600	37.800
NOV	44.500	49.000	47.600	48.100	47.600	47.300
DEC	45.100	47.500	49.500	48.100	49.200	48.700
COLOUR (HZU)			DET'N LIMIT = .5		GUIDELINE = 5.0 (A3)	
JAN	25.000	4.500	.	.	.	.
	18.500	4.500	5.000	4.500	6.500	6.000
FEB	12.000	4.500	5.500	4.500	6.000	6.000
MAR	28.000	19.000	15.000	15.000	.	13.500
APR	17.000	6.000	7.000	6.500	8.500	7.500
MAY	11.500	6.000	6.500	6.000	.	.
JUN	1.500 <T	1.500 <T	1.000 <T	1.000 <T	1.000 <T	3.000
JUL	18.000	8.500	8.500	8.000	.	.
AUG	17.000	7.000	8.000	8.000	9.000	9.000
SEP	12.500	5.000	4.500	5.000	.	.
OCT	14.500	4.500	4.500	3.500	5.500	5.000
NOV	32.000	7.000	9.500	9.000	10.500	17.000
DEC	13.500	4.500	7.000	5.000	7.000	6.500
CONDUCTIVITY (UMHO/CM)			DET'N LIMIT = 1		GUIDELINE = 400 (F2)	
JAN	598	621	.	.	.	.
	556	623	640	646	632	638
FEB	760	782	777	780	777	775
MAR	538	584	595	604	.	626
APR	665	691	687	676	689	674
MAY	638	662	654	653	.	.
JUN	605	624	659	680	648	649
JUL	613	629	621	616	.	.
AUG	494	518	519	529	518	518
SEP	487	508	503	510	.	.
OCT	599	613	622	615	619	609
NOV	677	721	719	727	722	718
DEC	816	861	859	854	871	855
FLUORIDE (MG/L)			DET'N LIMIT = .01		GUIDELINE = 2.400 (A1)	
JAN	.160	.100	.	.	.	.
	.200	.060	.080	.060	.060	.060
FEB	.140	.140	.160	.120	.140	.140

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DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
MAR	.100	.140	BDL	BDL	.	BDL
APR	.140	.120	.120	.120	.100	.120
MAY	.120	.120	.160	.140	.	.
JUN	.180	.140	.120	.140	.140	.140
JUL	.160	.160	.140	.140	.	.
AUG	.180	.180	.180	.180	.160	.180
SEP	.140	.140	.140	.140	.	.
OCT	.160	.140	.140	.120	.120	.120
NOV	.160	.100	.120	.080	.120	.100
DEC	.080	.100	.080	.080	.060	.040 <T
HARDNESS (MG/L)			DET'N LIMIT = .500		GUIDELINE = 80-100 (A6)	
JAN	294.000	284.000	.	.	.	.
	280.000	279.000	294.000	295.000	290.000	298.000
FEB	385.000	383.000	374.000	376.000	370.000	387.000
MAR	210.000	221.000	230.000	239.000	.	255.000
APR	331.000	329.000	324.000	323.000	319.000	320.000
MAY	329.000	325.000	318.000	317.000	.	.
JUN	314.000	296.000	322.000	333.000	312.000	321.000
JUL	298.000	291.000	290.000	293.000	.	.
AUG	232.000	237.000	237.000	241.000	238.000	238.000
SEP	225.000	221.000	223.000	225.000	.	.
OCT	285.100	276.900	277.000	271.300	276.600	276.300
NOV	318.000	318.000	323.000	323.000	319.000	321.000
DEC	413.000	405.000	406.000	403.000	408.000	404.000
IONCAL (DMNSLESS)			DET'N LIMIT = N/A		GUIDELINE = N/A	
JAN	3.362	.900	.	.	.	.
	.365	.176	.044	2.263	2.213	.310
FEB	.926	1.711	1.367	1.938	.891	6.516
MAR	1.062	1.644	2.031	1.461	.000 MAF	2.506
APR	1.290	.998	1.716	1.036	3.053	1.124
MAY	3.828	1.051	.539	.276	.	.
JUN	5.668	.610	1.945	1.477	.903	3.469
JUL	.016	.702	2.114	3.497	.	.
AUG	.267	1.250	1.016	1.805	.613	.777
SEP	.867	1.889	1.999	1.516	.	.
OCT	2.061	.406	.679	.094	.581	1.760
NOV	1.346	2.084	1.409	2.016	2.936	1.713
DEC	4.870	4.785	5.045	5.525	5.547	5.361
LANGELIERS INDEX (DMNSLESS)			DET'N LIMIT = N/A		GUIDELINE = N/A	
JAN	1.030	.677	.	.	.	.
	.794	.535	.485	.484	.601	.501
FEB	1.293	1.231	1.191	1.138	1.227	1.191
MAR	.656	.986	.843	.939	.	.915
APR	1.309	1.217	1.271	1.213	1.254	1.175

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DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
MAY	1.157	1.307	1.227	1.229	.	.
JUN	1.200	.969	1.042	1.129	1.099	1.097
JUL	.861	.783	.710	.769	.	.
AUG	.859	.908	.853	.929	.893	.949
SEP	.901	.795	.873	.838	.	.
OCT	1.132	1.134	.864	.840	.975	1.019
NOV	1.105	.919	1.119	.780	.963	1.114
DEC	1.425	1.312	1.394	1.384	1.302	1.394
MAGNESIUM (MG/L)			DET'N LIMIT = .050		GUIDELINE = 30 (F2)	
JAN	14.500	14.000	.	.	.	.
	16.100	14.500	14.900	15.400	15.100	15.000
FEB	20.400	20.400	19.700	20.000	20.000	19.700
MAR	11.200	11.200	11.800	12.200	.	13.500
APR	17.600	17.200	17.000	16.800	16.700	16.500
MAY	19.100	18.800	18.700	19.000	.	.
JUN	16.100	15.500	17.100	18.100	16.700	16.900
JUL	17.900	17.500	17.200	17.600	.	.
AUG	15.400	15.300	15.400	15.700	15.600	15.400
SEP	16.100	15.800	15.900	16.100	.	.
OCT	18.200	17.900	17.900	17.800	17.950	18.000
NOV	18.800	18.900	19.300	18.800	19.200	19.100
DEC	22.200	21.900	21.900	21.800	22.100	22.500
SODIUM (MG/L)			DET'N LIMIT = .200		GUIDELINE = 200 (C3)	
JAN	10.400	15.800	.	.	.	.
	9.800	17.600	16.000	16.000	15.800	15.800
FEB	11.400	16.600	16.400	16.400	16.200	16.200
MAR	24.800	30.200	28.200	28.200	.	25.200
APR	10.000	15.000	14.800	14.600	15.000	15.000
MAY	12.000	16.800	17.200	16.800	.	.
JUN	10.600	12.400	14.200	14.400	14.200	14.000
JUL	13.200	17.800	17.200	17.000	.	.
AUG	11.000	14.000	14.800	14.600	14.600	14.600
SEP	13.800	18.200	16.200	17.400	.	.
OCT	18.900	21.900	22.700	22.800	23.100	22.800
NOV	15.600	22.400	22.400	21.000	22.000	22.200
DEC	16.200	28.200	28.600	27.600	28.400	28.200
AMMONIUM TOTAL (MG/L)			DET'N LIMIT = 0.002		GUIDELINE = .05 (F2)	
JAN	.008 <T	.006 <T	.	.	.	.
	.030	.008 <T	.008 <T	010	.028	.012
FEB	.024	.004 <T	.010	.002 <T	.014	.006 <T
MAR	.236	.234	.210	.194	.	.156
APR	.004 <T	.012	.008 <T	.008 <T	BDL	.010
MAY	.042	.002 <T	.008 <T	.004 <T	.	.
JUN	BDL	BDL	BDL	BDL	BDL	BDL

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DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
JUL	.056	.006 <T	.006 <T	BDL	.	.
AUG	.058	.002 <T	.004 <T	BDL	.004 <T	.004 <T
SEP	.012	BDL	.006 <T	BDL	.	.
OCT	.080	.002 <T	.010	.002 <T	.006 <T	BDL
NOV	.010	.008 <T	.008 <T	.010	.008 <T	.016
DEC	.010	BDL	.020	BDL	.012	.010
NITRITE (MG/L)			DET'N LIMIT = 0.001		GUIDELINE = 1.000 (A1)	
JAN	.101	.002 <T	.	.	.	.
	.184	.004	.003 <T	.002 <T	.003 <T	.002 <T
FEB	.026	BDL	.001 <T	BDL	.002 <T	.001 <T
MAR	.028	.018	.032	.016	.	.015
APR	.038	.001 <T	.002 <T	.001 <T	.003 <T	.002 <T
MAY	.048	.004 <T	.002 <T	.003 <T	.	.
JUN	.109	.004 <T	.006	.004 <T	.023	.013
JUL	.042	BDL	.002 <T	.001 <T	.	.
AUG	.070	.004 <T	.005	.006	.004 <T	.008
SEP	.035	.001 <T	.001 <T	.001 <T	.	.
OCT	.035	.002 <T	.002 <T	.001 <T	.003 <T	.002 <T
NOV	.029	.001 <T	.002 <T	.001 <T	.003 <T	.002 <T
DEC	.028	BDL	.002 <T	.001 <T	.001 <T	.002 <T
TOTAL NITRATES (MG/L)			DET'N LIMIT = .020		GUIDELINE = 10.000 (A1)	
JAN	9.480	9.550	.	.	.	.
	7.150	6.950	7.500	8.100	7.430	7.450
FEB	9.750	10.100	10.400	10.000	10.400	10.200
MAR	3.290	3.330	3.670	3.930	.	4.570
APR	10.800	10.700	10.900	11.200	11.400	11.100
MAY	4.460	4.430	4.340	4.370	.	.
JUN	10.500	10.300	11.300	11.900	11.300	10.600
JUL	4.050	4.070	2.020	1.990	.	.
AUG	2.920	2.760	2.900	2.560	2.860	2.910
SEP	.225	.145	.170	.210	.	.
OCT	.500	.575	.465	.450	.470	.450
NOV	7.000	7.080	6.100	7.800	6.400	6.550
DEC	5.210	5.190	5.190	5.200	5.190	5.190
NITROGEN TOT KJELD (MG/L)			DET'N LIMIT = .020		GUIDELINE = N/A	
JAN	.850	.510	.	.	.	.
	1.700	.480	.510	.510	.550	.490
FEB	.660	.530	.560	.540	.580	.540
MAR	1.250	1.030	.580	.950	.	.880
APR	.800	.550	.550	.560	.610	.570
MAY	.800	.500	.570	.520	.	.
JUN	1.030	.620	.660	.660	.660	.600
JUL	.990	.640	.600	.590	.	.
AUG	1.000	.620	.640	.600	.610	.600

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DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
SEP	.580	.340	.330	.510	.	.
OCT	.610	.350	.400	.350	.390	.360
NOV	.820	.570	.560	.600	.600	.610
DEC	.600	.470	.570	.510	.540	.540
PH (DIMNSLESS)			DET'N LIMIT = N/A		GUIDELINE = 6.5-8.5(A4)	
JAN	8.290	8.070	.	.	.	.
	8.090	7.910	7.800	7.790	7.930	7.810
FEB	8.300	8.250	8.230	8.170	8.270	8.210
MAR	8.160	8.430	8.260	8.330	.	8.260
APR	8.470	8.410	8.470	8.420	8.470	8.390
MAY	8.330	8.470	8.410	8.420	.	.
JUN	8.420	8.250	8.260	8.320	8.340	8.320
JUL	8.080	8.030	7.960	8.020	.	.
AUG	8.300	8.330	8.280	8.340	8.320	8.370
SEP	8.330	8.250	8.330	8.290	.	.
OCT	8.370	8.420	8.150	8.140	8.260	8.310
NOV	8.310	8.160	8.320	8.010	8.170	8.320
DEC	8.390	8.290	8.380	8.380	8.280	8.390
PHOSPHORUS FIL REACT (MG/L)			DET'N LIMIT = .0005		GUIDELINE = N/A	
JAN	.068	.001 <T	.	.	.	.
	.263	.002	.	.	.	.
FEB	.026	.004	.	.	.	.
MAR	.017	.011	.	.	.	.
APR	.012	.000 <T	.	.	.	.
MAY	.001 <T	BDL	.	.	.	.
JUN	.034	.000 <T	.	.	.	.
JUL	.004	.002 <T	.	.	.	.
AUG	.002	.002 <T	.	.	.	.
SEP	.083	.001 <T	.	.	.	.
OCT	.005	.002 <T	.	.	.	.
NOV	.016	.002 <T	.	.	.	.
DEC	.022	.003	.	.	.	.
PHOSPHORUS TOTAL (MG/L)			DET'N LIMIT = .002		GUIDELINE = .40 (F2)	
JAN	.115	.008 <T	.	.	.	.
	.453	.004 <T	.	.	.	.
FEB	.044	.010	.	.	.	.
MAR	.080	.029	.	.	.	.
APR	.087	.007 <T	.	.	.	.
MAY	.061	.011	.	.	.	.
JUN	.133	.013	.	.	.	.
JUL	.069	.018	.	.	.	.
AUG	.062	.018	.	.	.	.
SEP	.072	.012	.	.	.	.
OCT	.038	.002 <T	.	.	.	.

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DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
NOV	.072	.007 <T	.	.	.	.
DEC	.036	.008 <T	.	.	.	.
SULPHATE (MG/L)			DET'N LIMIT = .200		GUIDELINE = 500. (A3)	
JAN	54.770	98.460	.	.	.	.
	60.220	107.500	102.400	102.700	107.840	105.960
FEB	84.380	82.710	77.670	77.990	79.810	73.830
MAR	49.350	55.700	61.500	64.210	.	72.310
APR	66.870	89.580	89.030	88.480	89.090	87.880
MAY	79.500	85.490	86.190	85.770	.	.
JUN	58.640	73.850	76.630	79.350	75.390	76.220
JUL	63.180	70.220	70.520	70.330	.	.
AUG	49.660	55.200	55.920	56.990	56.330	56.440
SEP	47.790	59.150	59.040	59.720	.	.
OCT	61.210	74.800	75.620	76.030	76.060	74.840
NOV	72.900	97.770	90.060	96.850	90.470	89.170
DEC	86.970	100.300	102.300	101.080	100.320	104.800
TURBIDITY (FTU)			DET'N LIMIT = .02		GUIDELINE = 1.00 (A1)	
JAN	30.000	1.700	.	.	.	.
	200.000 >	.950	.530	.760	.880	.840
FEB	13.900	2.000 RRV	.590	.380	.610	.530
MAR	36.000	.830	.480	.500	.	.500
APR	64.000	.470	.870	.570	.820	.590
MAY	39.000	.850	.680	.800	.	.
JUN	74.000	.630	.790	.480	1.270 RRV	.640
JUL	29.000	.980	1.050 RRV	.840	.	.
AUG	21.000	.680	.610	.710	.840	.400
SEP	43.000	.750	.470	.660	.	.
OCT	9.100	.810	.380	.260	.530	.480
NOV	57.000	.470	.870	.450	.720	.800
DEC	13.700	.770	.620	3.300 RRV	.770	5.300 RRV

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
METALS						
SILVER (UG/L)				DET'N LIMIT = .020 GUIDELINE = 50. (A1)		
JAN	.030 <T	.030 <T	.	.	.	.
	BDL	BDL	BDL	BDL	BDL	BDL
FEB	BDL	BDL	BDL	BDL	BDL	.230 <T
MAR	.070 <T	BDL	.040 <T	BDL	.	BDL
APR	.110 <T	.130 <T	.090 <T	.030 <T	.070 <T	.060 <T
MAY	BDL	BDL	BDL	BDL	.	.
JUN	BDL	BDL	.050 <T	BDL	BDL	BDL
JUL	BDL	BDL	BDL	BDL	.	.
AUG	BDL	BDL	BDL	BDL	.040 <T	BDL
SEP	BDL	BDL	BDL	BDL	.	.
OCT	BDL	BDL	BDL	BDL	BDL	BDL
NOV	BDL	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	BDL	BDL	BDL	BDL
ALUMINUM (UG/L)				DET'N LIMIT = .050 GUIDELINE = 100.(A4)		
JAN	359.600	313.200	.	.	.	.
	1740.000	27.840	39.440	22.040	16.240	16.240
FEB	208.800	51.040	64.960	44.080	38.280	39.440
MAR	684.400	174.000	150.800	150.800	.	208.800
APR	336.400	62.640	59.160	51.040	22.040	27.840
MAY	301.600	185.600	185.600	162.400	.	.
JUN	460.000	98.000	79.000	83.000	64.000	70.000
JUL	220.000	200.000	230.000	170.000	.	.
AUG	180.000	140.000	110.000	140.000	94.000	100.000
SEP	310.000	190.000	97.000	120.000	.	.
OCT	250.000	71.000	57.000	47.000	44.000	52.000
NOV	410.000	100.000	130.000	38.000	62.000	190.000
DEC	150.000	150.000	250.000	110.000	76.000	54.000
ARSENIC (UG/L)				DET'N LIMIT = 0.050 GUIDELINE = 50.0 (A1)		
JAN	.920 <T	.370 <T	.	.	.	.
	1.100	.360 <T	.580 <T	.530 <T	.470 <T	.490 <T
FEB	.940 <T	.970 <T	.600 <T	.850 <T	.890 <T	.650 <T
MAR	1.200	1.000 <T	1.200	1.100	.	1.100
APR	1.200	.490 <T	.660 <T	.640 <T	.640 <T	.470 <T
MAY	1.600	1.300	1.500	1.100	.	.
JUN	2.000	1.300	1.300	1.200	1.200	1.300
JUL	1.700	1.100	2.400	2.500	.	.
AUG	2.500	1.900	1.700	1.800	1.300	1.300
SEP	2.400	1.500	1.400	1.400	.	.
OCT	1.200	.460 <T	.670 <T	.530 <T	.480 <T	.530 <T
NOV	.840 <T	.720 <T	.730 <T	.770 <T	.810 <T	.820 <T
DEC	.540 <T	.550 <T	.470 <T	.500 <T	.530 <T	.600 <T
BARIUM (UG/L)				DET'N LIMIT = 0.020 GUIDELINE = 1000. (A1)		
JAN	39.000	29.000	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	64.000	30.000	32.000	27.000	28.000	27.000
FEB	45.000	31.000	31.000	29.000	27.000	29.000
MAR	34.000	23.000	23.000	23.000	.	23.000
APR	43.000	29.000	30.000	29.000	32.000	31.000
MAY	48.000	40.000	40.000	38.000	.	.
JUN	49.000	42.000	45.000	46.000	44.000	44.000
JUL	51.000	45.000	45.000	44.000	.	.
AUG	51.000	49.000	46.000	47.000	43.000	45.000
SEP	48.000	42.000	41.000	42.000	.	.
OCT	51.000	40.000	46.000	41.000	40.000	42.000
NOV	56.000	47.000	49.000	47.000	46.000	45.000
DEC	51.000	29.000	37.000	29.000	32.000	32.000
BORON (UG/L)				DET'N LIMIT = 0.200 GUIDELINE = 5000. (A1)		
JAN	27.000	27.000	.	.	.	.
	31.000	73.000	67.000	38.000	38.000	59.000
FEB	120.000	110.000	37.000	42.000	52.000	42.000
MAR	92.000	65.000	92.000	86.000	.	95.000
APR	40.000	280.000	370.000	350.000	160.000	110.000
MAY	290.000	280.000	320.000	140.000	.	.
JUN	59.000	46.000	63.000	75.000	110.000	74.000
JUL	85.000	54.000	100.000	100.000	.	.
AUG	100.000	100.000	100.000	100.000	58.000	57.000
SEP	93.000	96.000	97.000	98.000	.	.
OCT	64.000	49.000	70.000	55.000	56.000	62.000
NOV	49.000	49.000	49.000	50.000	50.000	48.000
DEC	33.000	31.000	33.000	31.000	33.000	32.000
BERYLLIUM (UG/L)				DET'N LIMIT = 0.010 GUIDELINE = N/A		
JAN	.030 <T	BDL	.	.	.	.
	.110 <T	.190 <T	.100 <T	BDL	BDL	.040 <T
FEB	.090 <T	.040 <T	.070 <T	BDL	.080 <T	.110 <T
MAR	.180 <T	.110 <T	.150 <T	.200 <T	.	.240 <T
APR	.090 <T	.330 <T	.540	.580	.160 <T	.210 <T
MAY	.350 <T	.460 <T	.440 <T	.090 <T	.	.
JUN	.130 <T	BDL	.030 <T	.050 <T	.200 <T	.140 <T
JUL	.270 <T	.040 <T	.170 <T	.250 <T	.	.
AUG	.260 <T	.040 <T	.180 <T	.170 <T	.040 <T	.040 <T
SEP	.220 <T	.210 <T	.180 <T	.100 <T	.	.
OCT	.070 <T	BDL	.050 <T	.020 <T	BDL	.030 <T
NOV	.020 <T	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	BDL	BDL	BDL	BDL
CADMIUM (UG/L)				DET'N LIMIT = 0.050 GUIDELINE = 5.000 (A1)		
JAN	.080 <T	BDL	.	.	.	.
	.100 <T	BDL	.100 <T	BDL	BDL	BDL
FEB	BDL	BDL	.090 <T	BDL	.090 <T	BDL

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DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
MAR	BDL	BDL	.070 <T	BDL	.	BDL
APR	BDL	.110 <T	.320 <T	BDL	BDL	BDL
MAY	.110 <T	.070 <T	BDL	BDL	.	.
JUN	.120 <T	BDL	.080 <T	.080 <T	.080 <T	.120 <T
JUL	.180 <T	.070 <T	.170 <T	BDL	.	.
AUG	.070 <T	BDL	BDL	BDL	BDL	BDL
SEP	.150 <T	BDL	BDL	BDL	.	.
OCT	BDL	.100 <T	.070 <T	BDL	BDL	BDL
NOV	BDL	BDL	BDL	BDL	BDL	BDL
DEC	.070 <T	.060 <T	.090 <T	BDL	.080 <T	.070 <T
COBALT (UG/L)			DET'N LIMIT = 0.020 GUIDELINE = N/A			
JAN	.320 <T	.070 <T	.	.	.	.
	1.700	.290 <T	.270 <T	.290 <T	.330 <T	.280 <T
FEB	.140 <T	BDL	BDL	BDL	BDL	.290 <T
MAR	.450 <T	.190 <T	.260 <T	.310 <T	.	.190 <T
APR	.370 <T	.030 <T	BDL	BDL	BDL	BDL
MAY	.580 <T	.300 <T	.220 <T	.230 <T	.	.
JUN	.560 <T	BDL	.060 <T	BDL	.030 <T	.070 <T
JUL	.500 <T	.190 <T	.190 <T	.110 <T	.	.
AUG	.340 <T	.130 <T	.090 <T	.070 <T	.170 <T	.100 <T
SEP	.560 <T	.110 <T	.140 <T	.150 <T	.	.
OCT	.470 <T	.250 <T	.190 <T	.180 <T	.200 <T	.200 <T
NOV	.460 <T	.060 <T	.090 <T	.030 <T	.080 <T	.060 <T
DEC	.240 <T	.080 <T	.060 <T	.130 <T	.160 <T	.030 <T
CHROMIUM (UG/L)			DET'N LIMIT = 0.100 GUIDELINE = 50. (A1)			
JAN	.890 <T	.640 <T	.	.	.	.
	2.100	9.200	8.100	2.600	3.300	6.100
FEB	11.000	9.000	1.300	2.000	3.000	2.500
MAR	9.700	4.500	9.000	9.000	.	9.900
APR	1.200	12.000	15.000	14.000	5.600	3.400
MAY	13.000	12.000	13.000	4.800	.	.
JUN	4.900	.470 <T	4.400	7.600	6.500	6.700
JUL	9.200	.580 <T	8.000	8.200	.	.
AUG	9.000	8.700	8.400	8.400	.400 <T	.330 <T
SEP	7.300	7.200	7.200	7.000	.	.
OCT	6.500	.310 <T	6.200	2.000	.690 <T	4.700
NOV	BDL	BDL	BDL	BDL	BDL	BDL
DEC	BDL	BDL	BDL	BDL	BDL	BDL
COPPER (UG/L)			DET'N LIMIT = .100 GUIDELINE = 1000 (A3)			
JAN	2.700	2.300	.	.	.	.
	5.200	1.900	34.000	3.400	80.000	6.500
FEB	2.500	2.200	27.000	3.800	32.000	4.600
MAR	3.600	2.900	28.000	3.700	.	4.000
APR	3.000	5.600	15.000	3.100	76.000	5.600

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DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
MAY	2.900	2.700	16.000	2.800	.	.
JUN	11.000	2.400	45.000	5.100	34.000	17.000
JUL	4.500	2.400	27.000	4.500	.	.
AUG	4.700	2.000	21.000	3.500	31.000	7.200
SEP	4.200	1.400	23.000	3.400	.	.
OCT	7.900	1.300	22.000	2.500	42.000	17.000
NOV	3.700	4.000	26.000	3.400	57.000	29.000
DEC	3.700 <T	3.500 <T	27.000	2.800 <T	380.000	320.000
IRON (UG/L)				DET'N LIMIT = 4.000 GUIDELINE = 300. (A3)		
JAN	400.000	31.000 <T	.	.	.	.
	1300.000	BDL	BDL	BDL	52.000	79.000
FEB	190.000	6.900 <T	9.100 <T	11.000 <T	50.000 <T	42.000 <T
MAR	510.000	15.000 <T	BDL	9.900 <T	.	84.000
APR	480.000	BDL	BDL	BDL	50.000 <T	36.000 <T
MAY	390.000	BDL	BDL	BDL	.	.
JUN	520.000	5.100 <T	BDL	BDL	35.000 <T	33.000 <T
JUL	300.000	BDL	12.000 <T	BDL	.	.
AUG	260.000	BDL	BDL	BDL	19.000 <T	23.000 <T
SEP	560.000	BDL	BDL	BDL	.	.
OCT	450.000	13.000 <T	BDL	5.400 <T	88.000	35.000 <T
NOV	430.000	BDL	5.200 <T	BDL	58.000	110.000
DEC	190.000	BDL	12.000 <T	7.000 <T	36.000 <T	47.000 <T
MERCURY (UG/L)				DET'N LIMIT = 0.010 GUIDELINE = 1.000 (A1)		
JAN	BDL	.030 <T	.	.	.	.
	.040 <T	.020 <T	.	.020 <T	.	.020 <T
FEB	.020 <T	BDL	.	BDL	.	BDL
MAR	.050 <T	.050 <T	.	BDL	.	.020 <T
APR	.290	.300	.	.020 <T	.	.030 <T
MAY	.120	.120 UCS	.	.030 <T	.	.
JUN	ISS	ISS	.	.040 <T	.	.080
JUL	.040 <T	.030 <T	.	.030 <T	.	.
AUG	.050 <T	.040 <T	.	.030 <T	.	.030 <T
SEP	.050 <T	.040 <T	.	.040 <T	.	.
OCT	.040 <T	.050 <T	.	.040 <T	.	.030 <T
NOV	.030 <T	.030 <T	.	.030 <T	.	.020 <T
DEC	.030 <T	.020 <T	.	.030 <T	.	.030 <T
MANGANESE (UG/L)				DET'N LIMIT = .050 GUIDELINE = 50.0 (A3)		
JAN	19.000	38.000	.	.	.	.
	95.000	21.000	11.000	9.400	11.000	10.000
FEB	12.000	6.100	3.400	3.600	6.100	6.800
MAR	26.000	4.400	4.300	4.100	.	19.000
APR	45.000	8.400	5.900	4.400	10.000	7.800
MAY	46.000	5.700	5.900	1.600	.	.
JUN	60.000	11.000	11.000	7.100	11.000	9.700

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DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
JUL	55.000	18.000	28.000	7.400	.	.
AUG	73.000	10.000	5.400	6.000	7.900	8.200
SEP	84.000	15.000	9.100	7.500	.	.
OCT	54.000	11.000	2.800	3.300	6.100	7.400
NOV	33.000	17.000	18.000	10.000	8.000	25.000
DEC	16.000	9.500	12.000	6.800	12.000	12.000
MOLYBDENUM (UG/L)				DET'N LIMIT = 0.020 GUIDELINE = N/A		
JAN	.720	1.300	.	.	.	.
	.210 <T	1.600	1.500	1.500	1.400	1.600
FEB	1.200	1.300	1.600	1.400	1.400	1.800
MAR	1.100	1.700	1.600	1.500	.	1.500
APR	1.100	1.800	2.000	1.900	1.900	2.000
MAY	1.700	2.500	2.300	2.800	.	.
JUN	1.700	3.400	3.000	3.000	3.200	3.200
JUL	2.800	3.800	4.200	4.200	.	.
AUG	2.800	3.700	3.700	3.800	3.500	3.400
SEP	2.000	3.300	3.400	3.400	.	.
OCT	2.000	2.500	2.700	2.500	2.600	2.700
NOV	.850	1.900	1.800	1.700	1.900	1.800
DEC	.890	1.100	1.200	1.300	1.300	1.300
NICKEL (UG/L)				DET'N LIMIT = 0.100 GUIDELINE = 50. (F3)		
JAN	BDL	.170 <T	.	.	.	.
	4.500	2.700	4.000	2.300	3.400	2.100
FEB	BDL	BDL	BDL	BDL	BDL	2.600
MAR	2.100	1.300 <T	2.300	1.800 <T	.	1.700 <T
APR	.610 <T	.480 <T	1.800 <T	BDL	3.700	.180 <T
MAY	2.100	1.900 <T	2.600	2.000 <T	.	.
JUN	BDL	BDL	3.100	.350 <T	2.200	.550 <T
JUL	.960 <T	1.800 <T	2.700	1.900 <T	.	.
AUG	.760 <T	.340 <T	1.700 <T	.740 <T	4.700	1.600 <T
SEP	.760 <T	.340 <T	1.100 <T	.390 <T	.	.
OCT	1.300 <T	.580 <T	2.000 <T	.750 <T	8.700	.990 <T
NOV	BDL	BDL	1.600 <T	.110 <T	5.100	.590 <T
DEC	BDL	.790 <T	1.300 <T	.980 <T	4.900	1.600 <T
LEAD (UG/L)				DET'N LIMIT = 0.050 GUIDELINE = 50. (A1)		
JAN	.710	.130 <T	.	.	.	.
	4.300	BDL	4.100	.260	2.300	.370
FEB	.470	.140 <T	3.900	.520	17.000	1.700
MAR	.820	.060 <T	3.100	.200 <T	.	.310
APR	1.100	2.100	8.400	.580	2.900	.480
MAY	.980	.520	3.100	.100 <T	.	.
JUN	2.200	.440	15.000	1.100	8.900	3.600
JUL	.910	.690	7.600	1.000	.	.
AUG	1.600	.350	2.900	.560	1.800	1.000

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DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
SEP	1.800	.230	2.400	.580	.	.
OCT	2.400	.360	2.100	.250	1.500	.620
NOV	1.100	.160 <T	2.600	.240	1.500	.420
DEC	.480 <T	.100 <T	5.900	.290 <T	3.300	.980
ANTIMONY (UG/L)				DET'N LIMIT = .050 GUIDELINE = 146. (D4)		
JAN	.340	.450	.	.	.	.
	.150 <T	.380	.450	.410	.480	.570
FEB	.340	.440	.440	.400	.450	.640
MAR	.490	.550	.610	.670	.	.610
APR	.400	.540	.550	.520	.590	.450
MAY	.560	.700	.810	.730	.	.
JUN	.740	1.000	1.000	.750	1.000	1.000
JUL	.640	.850	.880	.900	.	.
AUG	.820	.950	.930	.970	.980	.820
SEP	.630	.750	.640	.700	.	.
OCT	.470	.550	.590	.610	.700	.590
NOV	.470	.320	.410	.350	.560	.400
DEC	.430 <T	.550	.370 <T	.440 <T	.460 <T	.450 <T
SELENIUM (UG/L)				DET'N LIMIT = 0.200 GUIDELINE = 10. (A1)		
JAN	.630 <T	.950 <T	.	.	.	.
	1.600 <T	1.600 <T	2.000 <T	2.000 <T	1.100 <T	1.300 <T
FEB	2.600 <T	3.700 <T	2.600 <T	3.500 <T	2.900 <T	7.600 <T
MAR	1.100 <T	4.200 <T	3.100 <T	1.000 <T	.	2.800 <T
APR	5.400 <T	6.100 <T	5.500 <T	8.400 <T	8.400 <T	8.800 <T
MAY	.540 <T	4.600 <T	4.200 <T	5.000 <T	.	.
JUN	BDL	3.600 <T	4.500 <T	5.300	2.400 <T	5.100
JUL	2.200 <T	8.100	5.200	8.100	.	.
AUG	2.500 <T	6.300	7.100	6.700	6.500	4.900 <T
SEP	BDL	3.100 <T	4.000 <T	3.800 <T	.	.
OCT	BDL	BDL	1.300 <T	1.700 <T	1.500 <T	2.000 <T
NOV	2.000 <T	1.300 <T	BDL	1.200 <T	1.100 <T	BDL
DEC	1.100 <T	2.300 <T	2.000 <T	1.700 <T	1.200 <T	1.700 <T
STRONTIUM (UG/L)				DET'N LIMIT = .050 GUIDELINE = N/A		
JAN	200.000	190.000	.	.	.	.
	200.000	180.000	190.000	180.000	180.000	180.000
FEB	250.000	240.000	240.000	240.000	230.000	270.000
MAR	150.000	150.000	170.000	160.000	.	180.000
APR	250.000	240.000	240.000	230.000	240.000	240.000
MAY	260.000	260.000	260.000	260.000	.	.
JUN	240.000	230.000	250.000	260.000	240.000	250.000
JUL	270.000	260.000	250.000	260.000	.	.
AUG	230.000	240.000	230.000	230.000	220.000	210.000
SEP	220.000	210.000	210.000	220.000	.	.
OCT	230.000	210.000	230.000	220.000	220.000	220.000

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DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
NOV	270.000	270.000	270.000	260.000	260.000	260.000
DEC	300.000	290.000	300.000	290.000	290.000	280.000
TITANIUM (UG/L)				DET'N LIMIT = .050	GUIDELINE = N/A	
JAN	12.000	6.600	.	.	.	.
	17.000	8.000	8.300	8.100	7.900	8.400
FEB	14.000	7.400	6.900	7.200	7.500	7.400
MAR	30.000	5.700	6.000	6.100	.	7.600
APR	22.000	16.000	15.000	16.000	16.000	16.000
MAY	13.000	6.600	7.300	7.200	.	.
JUN	24.000	17.000	18.000	19.000	19.000	19.000
JUL	16.000	12.000	14.000	13.000	.	.
AUG	10.000	8.300	8.200	8.200	8.200	7.900
SEP	15.000	12.000	12.000	12.000	.	.
OCT	8.900	5.500	6.400	5.600	6.300	6.000
NOV	10.000	6.700	5.900	6.100	6.000	6.400
DEC	13.000	9.700	10.000	10.000	9.800	9.400
THALLIUM (UG/L)				DET'N LIMIT = .010	GUIDELINE = 13. (D4)	
JAN	BDL	BDL	.	.	.	.
	BDL	BDL	BDL	BDL	BDL	BDL
FEB	.050 <T	.020 <T	.070 <T	BDL	.040 <T	.160 <T
MAR	BDL	BDL	.030 <T	BDL	.	BDL
APR	.020 <T	BDL	BDL	.050 <T	BDL	BDL
MAY	.060 <T	BDL	.070 <T	BDL	.	.
JUN	.050 <T	.020 <T	.060 <T	.040 <T	.040 <T	.030 <T
JUL	BDL	.020 <T	BDL	BDL	.	.
AUG	.040 <T	.030 <T	BDL	.070 <T	.040 <T	.040 <T
SEP	.030 <T	.040 <T	BDL	BDL	.	.
OCT	.030 <T	.020 <T	BDL	.030 <T	BDL	BDL
NOV	.020 <T	BDL	BDL	BDL	.030 <T	.030 <T
DEC	BDL	BDL	BDL	BDL	BDL	BDL
URANIUM (UG/L)				DET'N LIMIT = .020	GUIDELINE = 100.(B1)	
JAN	2.000	1.300	.	.	.	.
	2.100	1.100	1.400	1.400	1.300	1.300
FEB	2.900	3.100	3.100	2.800	2.700	3.200
MAR	1.300	1.500	1.600	1.500	.	1.600
APR	2.800	2.600	2.700	2.700	2.800	2.800
MAY	2.900	3.000	2.900	3.300	.	.
JUN	2.800	2.500	2.500	2.900	2.700	3.000
JUL	2.500	2.800	3.300	3.100	.	.
AUG	1.700	2.100	2.100	2.000	2.000	2.000
SEP	1.400	1.500	1.400	1.500	.	.
OCT	1.600	1.600	1.500	1.600	1.500	1.500
NOV	2.200	2.100	2.400	2.300	2.300	2.200
DEC	2.500	2.700	2.600	2.400	2.800	2.600

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
VANADIUM (UG/L)				DET'N LIMIT = .050	GUIDELINE = N/A	
JAN	1.200	.380 <T	.	.	.	.
	3.100	.360 <T	.420 <T	.300 <T	.330 <T	.230 <T
FEB	.610	.160 <T	.220 <T	.080 <T	.100 <T	.410 <T
MAR	1.600	.340 <T	.420 <T	.300 <T	.	.440 <T
APR	1.100	.400 <T	.400 <T	.410 <T	.330 <T	.320 <T
MAY	1.200	.500 <T	.580	.540	.	.
JUN	1.900	.930	.900	.990	.790	.840
JUL	1.800	1.300	1.400	1.400	.	.
AUG	1.700	1.200	1.200	1.200	1.100	1.100
SEP	1.700	1.000	.990	.960	.	.
OCT	1.300	.640	.700	.570	.580	.600
NOV	1.300	.540	.630	.610	.500 <T	.670
DEC	.720	.440 <T	.580	.440 <T	.480 <T	.440 <T
ZINC (UG/L)				DET'N LIMIT = .001	GUIDELINE = 5000. (A3)	
JAN	11.000	12.000	.	.	.	.
	24.000	8.500	97.000	28.000	23.000	3.800
FEB	11.000	5.100	52.000	17.000	160.000	4.100
MAR	11.000	1.600	25.000	6.100	.	2.500
APR	13.000	5.100	45.000	15.000	55.000	4.400
MAY	8.700	3.600	23.000	5.900	.	.
JUN	25.000	6.300	110.000	30.000	20.000	6.700
JUL	10.000	7.300	48.000	18.000	.	.
AUG	14.000	6.000	34.000	19.000	34.000	7.100
SEP	13.000	5.400	56.000	25.000	.	.
OCT	4.900	5.800	63.000	24.000	64.000	6.400
NOV	9.700	5.200	54.000	26.000	44.000	6.000
DEC	14.000	4.800	65.000	19.000	110.000	14.000

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
PESTICIDES & PCB						
ALPHA BHC (NG/L) DET'N LIMIT = 1.000 GUIDELINE = 700 (G)						
JAN	BDL	BDL	.	.	.	.
	BDL	BDL	.	2.000 <T	.	7.000 <T
FEB	BDL	BDL	.	BDL	.	BDL
MAR	1.000 <T	3.000 <T	.	2.000 <T	.	1.000 <T
APR	BDL	BDL	.	BDL	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	1.000 <T	ILA	.	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.
AUG	BDL	BDL	.	BDL	.	BDL
SEP	BDL	2.000 <T	.	BDL	.	.
OCT	BDL	IIS	.	BDL	.	BDL
NOV	BDL	BDL	.	BDL	.	BDL
DEC	BDL	BDL	.	BDL	.	BDL
LINDANE (NG/L) DET'N LIMIT = 1.000 GUIDELINE = 4000 (A1)						
JAN	2.000 <T	4.000 <T	.	.	.	.
	BDL	BDL	.	2.000 <T	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MAR	BDL	2.000 <T	.	1.000 <T	.	1.000 <T
APR	BDL	BDL	.	BDL	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	ILA	.	BDL	.	BDL
JUL	1.000 <T	BDL	.	BDL	.	.
AUG	BDL	BDL	.	BDL	.	BDL
SEP	BDL	BDL	.	BDL	.	.
OCT	BDL	IIS	.	BDL	.	BDL
NOV	BDL	BDL	.	BDL	.	BDL
DEC	BDL	BDL	.	BDL	.	BDL
ATRAZINE (NG/L) DET'N LIMIT = 50.00 GUIDELINE = 60000 (B3)						
JAN	BDL	BDL	.	.	.	.
	400.000 <T	460.000 <T	.	700.000	.	550.000
FEB	BDL	BDL	.	BDL	.	BDL
MAR	80.000 <T	BDL	.	220.000 <T	.	210.000 <T
APR	BDL	BDL	.	INR	.	BDL
MAY	210.000 <T	BDL	.	BDL	.	.
JUN	7210.000	3300.000	.	2800.000	.	3320.000
JUL	3330.000	2070.000	.	1300.000	.	.
AUG	3460.000	2180.000	.	.	.	.
SEP	300.000 <T	230.000 <T	.	INR	.	.
OCT	300.000 <T	300.000 <T	.	.	.	.
NOV	790.000	880.000	.	.	.	.
DEC	630.000	510.000	.	.	.	.
CYANAZINE (BLADEX) (NG/L) DET'N LIMIT = 100.00 GUIDELINE = 10000 (B3)						
JAN	BDL	BDL	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	BDL	BDL	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MAR	BDL	BDL	.	BDL	.	BDL
APR	BDL	BDL	.	INR	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	2940.000	2050.000	.	1420.000	.	2230.000
JUL	BDL	BDL	.	BDL	.	.
AUG	BDL	BDL	.	.	.	.
SEP	BDL	BDL	.	INR	.	.
OCT	BDL	BDL	.	.	.	.
NOV	BDL	BDL	.	.	.	.
DEC	BDL	BDL	.	.	.	.
D-ETHYL ATRAZINE (NG/L)			DET'N LIMIT = N/A		GUIDELINE N/A	
JAN	BDL	BDL	.	.	.	.
	270.000 <T	280.000 <T	.	840.000 <T	.	560.000 <T
FEB	BDL	BDL	.	BDL	.	BDL
MAR	BDL	BDL	.	BDL	.	BDL
APR	BDL	BDL	.	INR	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	340.000 <T	480.000 <T	.	470.000 <T	.	470.000 <T
JUL	780.000 <T	450.000 <T	.	390.000 <T	.	.
AUG	BDL	560.000 <T	.	.	.	.
SEP	270.000 <T	BDL	.	INR	.	.
OCT	BDL	BDL	.	.	.	.
NOV	330.000 <T	310.000 <T	.	.	.	.
DEC	BDL	BDL	.	.	.	.
PROPAZINE (NG/L)			DET'N LIMIT = 50.00		GUIDELINE = 16000 (D2)	
JAN	BDL	BDL	.	.	.	.
	BDL	BDL	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MAR	BDL	BDL	.	BDL	.	BDL
APR	BDL	BDL	.	INR	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.
AUG	BDL	BDL	.	.	.	.
SEP	BDL	BDL	.	INR	.	.
OCT	BDL	BDL	.	.	.	.
NOV	50.000 <T	BDL	.	.	.	.
DEC	BDL	BDL	.	.	.	.
SIMAZINE (NG/L)			DET'N LIMIT = 50.00		GUIDELINE = 10000 (B3)	
JAN	BDL	BDL	.	.	.	.
	BDL	BDL	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
MAR	BDL	BDL	.	BDL	.	BDL
APR	BDL	BDL	.	INR	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.
AUG	BDL	BDL	.	.	.	.
SEP	BDL	BDL	.	INR	.	.
OCT	BDL	BDL	.	.	.	.
NOV	680.000	840.000	.	.	.	.
DEC	BDL	EDL	.	.	.	.
METOLACHLOR (NG/L)			DET'N LIMIT = 500.		GUIDELINE = 50000 (83)	
JAN	BDL	BDL	.	.	.	.
	BDL	BDL	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MAR	BDL	BDL	.	BDL	.	BDL
APR	BDL	BDL	.	INR	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	10700.000	6200.000	.	4480.000 <T	.	5170.000
JUL	BDL	BDL	.	BDL	.	.
AUG	BDL	1890.000 <T	.	.	.	.
SEP	BDL	BDL	.	INR	.	.
OCT	BDL	BDL	.	.	.	.
NOV	BDL	BDL	.	.	.	.
DEC	BDL	BDL	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
PHENOLICS (UG/L PHENOLICS)			DET'N LIMIT = 0.2		GUIDELINE = 2.00 (A3)	
JAN	3.600	2.000	.	.	.	.
	3.600	2.600	.	.	.	.
FEB	2.200	2.000	.	.	.	.
MAR	6.600	6.800	.	.	.	.
APR	1.800	1.400	.	.	.	.
MAY	2.000	2.200	.	.	.	.
JUN	1.800	2.200	.	.	.	.
JUL	1.200	1.000	.	.	.	.
AUG	1.600	1.600	.	.	.	.
SEP	2.000	2.200	.	.	.	.
OCT	2.200	1.800	.	.	.	.
NOV	1.200	1.600	.	.	.	.
DEC	.400 <T	.400 <T	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
SPECIFIC PESTICIDES						
CARBARYL (NG/L)			DET'N LIMIT = 200.		GUIDELINE = 70000 (A1)	
JUN	1600.000 <T	650.000 <T	.	.	.	.
NOV	BDL	BDL	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
VOLATILES						
BENZENE (UG/L)			DET'N LIMIT = .050 GUIDELINE = 5.0 (B1)			
JAN	BDL	BDL	.	.	.	.
	BDL	BDL	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MAR	BDL	BDL	.	BDL	.	BDL
APR	BDL	BDL	.	BDL	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.
AUG	BDL	BDL	.	.050 <T	.	BDL
SEP	BDL	BDL	.	BDL	.	.
OCT	BDL	BDL	.	BDL	.	BDL
NOV	BDL	BDL	.	BDL	.	BDL
DEC	BDL	BDL	.	BDL	.	BDL
TOLUENE (UG/L)			DET'N LIMIT = .050 GUIDELINE = 24.0 (B4)			
JAN	.100 <T	.100 <T	.	.	.	.
	.100 <T	.100 <T	.	.100 <T	.	.050 <T
FEB	.150 <T	.100 <T	.	BDL	.	BDL
MAR	BDL	BDL	.	BDL	.	.050 <T
APR	.100 <T	.050 <T	.	BDL	.	.050 <T
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	BDL	.	.050 <T	.	BDL
JUL	BDL	BDL	.	.050 <T	.	.
AUG	.100 <T	BDL	.	.100 <T	.	.100 <T
SEP	.050 <T	.050 <T	.	.050 <T	.	.
OCT	BDL	BDL	.	BDL	.	BDL
NOV	BDL	BDL	.	BDL	.	BDL
DEC	BDL	BDL	.	BDL	.	BDL
ETHYLBENZENE (UG/L)			DET'N LIMIT = .050 GUIDELINE = 2.4 (B4)			
JAN	.050 <T	BDL	.	.	.	.
	.100 <T	.050 <T	.	.050 <T	.	BDL
FEB	.100 <T	.050 <T	.	.100 <T	.	.050 <T
MAR	BDL	.050 <T	.	.050 <T	.	.050 <T
APR	.050 <T	.050 <T	.	.050 <T	.	.050 <T
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.
AUG	.050 <T	BDL	.	BDL	.	BDL
SEP	BDL	BDL	.	BDL	.	.
OCT	BDL	BDL	.	BDL	.	BDL
NOV	BDL	BDL	.	BDL	.	BDL
DEC	BDL	BDL	.	BDL	.	BDL
M-XYLENE (UG/L)			DET'N LIMIT = .100 GUIDELINE = 300 (B4)			
JAN	BDL	BDL	.	.	.	.

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
JAN	BDL	BDL	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MAR	BDL	BDL	.	BDL	.	BDL
APR	.100 <T	BDL	.	.100 <T	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.
AUG	.200 <T	BDL	.	BDL	.	BDL
SEP	BDL	BDL	.	BDL	.	.
OCT	BDL	BDL	.	BDL	.	BDL
NOV	BDL	BDL	.	BDL	.	BDL
DEC	BDL	BDL	.	BDL	.	BDL
O-XYLENE (UG/L)				DET'N LIMIT = .050 GUIDELINE = 300 (B4)		
JAN	BDL	BDL	.	.	.	.
	BDL	.050 <T	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MAR	BDL	BDL	.	BDL	.	BDL
APR	BDL	BDL	.	BDL	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	BDL	.	.050 <T	.	BDL
JUL	BDL	BDL	.	BDL	.	.
AUG	.100 <T	BDL	.	BDL	.	BDL
SEP	BDL	BDL	.	BDL	.	.
OCT	BDL	BDL	.	BDL	.	BDL
NOV	BDL	BDL	.	BDL	.	BDL
DEC	BDL	BDL	.	BDL	.	BDL
STYRENE (UG/L)				DET'N LIMIT = .050 GUIDELINE = 46.5 (D2)		
JAN	.400 <T	.150 <T	.	.	.	.
	BDL	.100 <T	.	BDL	.	BDL
FEB	.650 UCS	.150 <T	.	.400 <T	.	.250 <T
MAR	.100 <T	.250 <T	.	.250 <T	.	.050 <T
APR	.200 <T	.200 <T	.	.400 <T	.	.350 <T
MAY	BDL	.050 <T	.	.050 <T	.	.
JUN	BDL	.050 <T	.	.050 <T	.	.100 <T
JUL	.050 <T	.200 <T	.	.050 <T	.	.
AUG	BDL	.050 <T	.	.100 <T	.	.150 <T
SEP	.100 <T	.150 <T	.	BDL	.	.
OCT	BDL	BDL	.	BDL	.	BDL
NOV	BDL	.050 <T	.	.150 <T	.	.050 <T
DEC	.050 <T	.100 <T	.	.100 <T	.	BDL
CHLOROFORM (UG/L)				DET'N LIMIT = .100 GUIDELINE = 350 (A1+)		
JAN	.100 <T	35.500	.	.	.	.
	BDL	40.800	.	44.700	.	36.400
FEB	.100 <T	60.200	.	49.000	.	43.200

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
MAR	BDL	10.300	.	13.400	.	23.200
APR	BDL	59.000	.	51.900	.	51.200
MAY	BDL	60.100	.	51.200	.	.
JUN	BDL	49.600	.	62.000	.	56.000
JUL	.300 <T	73.400	.	67.000	.	.
AUG	BDL	91.000	.	74.500	.	75.200
SEP	BDL	69.100	.	54.000	.	.
OCT	BDL	48.800	.	53.600	.	49.300
NOV	BDL	100.600	.	58.800	.	64.400
DEC	BDL	74.700	.	73.900	.	47.200
111, TRICHLOROETHANE (UG/L)				DET'N LIMIT = .020 GUIDELINE = 200 (D1)		
JAN	.060 <T	BDL	.	.	.	.
	BDL	BDL	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MAR	.080 <T	BDL	.	BDL	.	.040 <T
APR	BDL	BDL	.	BDL	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	BDL	.	BDL	.	BDL
JUL	BDL	BDL	.	BDL	.	.
AUG	BDL	BDL	.	BDL	.	BDL
SEP	BDL	BDL	.	BDL	.	.
OCT	BDL	BDL	.	BDL	.	BDL
NOV	BDL	BDL	.	BDL	.	BDL
DEC	BDL	BDL	.	BDL	.	BDL
DICHLOROBROMOMETHANE (UG/L)				DET'N LIMIT = .050 GUIDELINE = 350 (A1+)		
JAN	BDL	12.650	.	.	.	.
	BDL	13.850	.	14.300	.	12.300
FEB	BDL	19.000	.	17.400	.	15.300
MAR	BDL	.800	.	2.200	.	5.000
APR	BDL	16.800	.	14.750	.	13.700
MAY	BDL	17.300	.	15.600	.	.
JUN	BDL	16.650	.	20.950	.	17.400
JUL	BDL	24.800	.	21.400	.	.
AUG	BDL	30.250	.	25.400 APS	.	25.500
SEP	BDL	21.750	.	19.300	.	.
OCT	BDL	23.450	.	23.650 APS	.	21.700 APS
NOV	BDL	33.650	.	22.900	.	22.900
DEC	BDL	22.900	.	23.450	.	17.900
CHLORODIBROMOMETHANE (UG/L)				DET'N LIMIT = .100 GUIDELINE = 350 (A1+)		
JAN	BDL	1.900	.	.	.	.
	BDL	2.500	.	2.200	.	1.900
FEB	BDL	3.400	.	2.800	.	2.600
MAR	BDL	BDL	.	.400 <T	.	.800 <T
APR	BDL	3.000	.	3.300	.	3.200

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
MAY	BDL	3.400	.	3.000	.	.
JUN	BDL	3.000	.	4.300	.	3.400
JUL	BDL	5.600	.	5.100	.	.
AUG	BDL	7.300	.	6.400 APS	.	6.000
SEP	BDL	4.300	.	5.000	.	.
OCT	BDL	7.400	.	5.800	.	5.400
NOV	BDL	6.600	.	5.200	.	5.100
DEC	BDL	4.900	.	5.100	.	4.200
T-CHLORDETHYLENE (UG/L)				DET'N LIMIT = .050 GUIDELINE = 10.0 (C2)		
JAN	BDL	BDL	.	.	.	.
	BDL	BDL	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MA	BDL	BDL	.	BDL	.	.050 <T
APR	BDL	BDL	.	.050 <T	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	.100 <T	.	.100 <T	.	BDL
JUL	BDL	BDL	.	BDL	.	.
AUG	BDL	BDL	.	BDL	.	BDL
SEP	BDL	.100 <T	.	.150 <T	.	.
OCT	BDL	BDL	.	BDL	.	BDL
NOV	BDL	BDL	.	BDL	.	BDL
DEC	BDL	BDL	.	BDL	.	BDL
BROMOFORM (UG/L)				DET'N LIMIT = .200 GUIDELINE = 350 (A1+)		
JAN	BDL	BDL	.	.	.	.
	BDL	BDL	.	BDL	.	BDL
FEB	BDL	BDL	.	BDL	.	BDL
MAR	BDL	BDL	.	BDL	.	BDL
APR	BDL	1.200 <T	.	BDL	.	BDL
MAY	BDL	BDL	.	BDL	.	.
JUN	BDL	BDL	.	.200 <T	.	BDL
JUL	BDL	.200 <T	.	.200 <T	.	.
AUG	BDL	.200 <T	.	BDL	.	.200 <T
SEP	BDL	BDL	.	.400 <T	.	.
OCT	BDL	.600 <T	.	.400 <T	.	.200 <T
NOV	BDL	.600 <T	.	.400 <T	.	.200 <T
DEC	BDL	BDL	.	BDL	.	BDL
TOTL TRIHALOMETHANES (UG/L)				DET'N LIMIT = .500 GUIDELINE = 350 (A1)		
JAN	BDL	50.050	.	.	.	.
	BDL	57.150	.	61.200	.	50.600
FEB	BDL	82.600	.	69.200	.	61.100
MAR	BDL	11.100	.	16.000	.	29.000
APR	BDL	80.000	.	69.950	.	68.100
MAY	BDL	80.800	.	69.800	.	.
JUN	BDL	69.250	.	87.450	.	76.800

TABLE 5

DRINKING WATER SURVEILLANCE PROGRAM DRESDEN WTP 1989

	WATER TREATMENT PLANT		DISTRIBUTION SYSTEM			
	RAW	TREATED	SITE 1		SITE 2	
			STANDING	FREE FLOW	STANDING	FREE FLOW
JUL	BDL	104.000	.	93.700	.	.
AUG	BDL	128.750	.	106.300	.	106.900
SEP	BDL	95.150	.	78.700	.	.
OCT	BDL	80.250	.	83.450	.	76.600
NOV	BDL	141.450	.	87.300	.	92.600
DEC	BDL	102.500	.	102.450	.	69.300

TRACE LEVELS OF TOLUENE ARE LABORATORY ARTIFACTS DERIVED FROM THE ANALYTICAL METHODOLOGY.

TRACE LEVELS OF STYRENE ARE CONSIDERED TO BE LABORATORY ARTIFACTS RESULTING FROM THE LABORATORY SHIPPING CONTAINERS.

Table 6

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE
BACTERIOLOGICAL			
FECAL COLIFORM MEMBRANE FILTRATION	CT/100ML	0	0 (A1)
STANDARD PLATE COUNT MEMBRANE FILTRATION	CT/ML	0	500/ML (A1)
TOTAL COLIFORM MEMBRANE FILTRATION	CT/100ML	0	5/100mL (A1)
TOTAL COLIFORM BACKGROUND MF	CT/100ML	0	N/A
CHLOROAROMATICS			
HEXACHLOROBUTADIENE	NG/L	1.000	450. (D4)
1,2,3-TRICHLOROBENZENE	NG/L	5.000	10000 (I)
1,2,3,4-TETRACHLOROBENZENE	NG/L	1.000	10000 (I)
1,2,3,5-TETRACHLOROBENZENE	NG/L	1.000	10000 (I)
1,2,4-TRICHLOROBENZENE	NG/L	5.000	10000 (I)
1,2,4,5-TETRACHLOROBENZENE	NG/L	1.000	38000 (D4)
1,3,5-TRICHLOROBENZENE	NG/L	5.000	10000 (D4)
HEXACHLOROBENZENE	NG/L	1.0	10. (C1)
HEXACHLOROETHANE	NG/L	1.000	1900. (D4)
OCTACHLOROSTYRENE	NG/L	1.000	N/A
PENTACHLOROBENZENE	NG/L	1.000	74000 (D4)
2,3,6-TRICHLOROTOLUENE	NG/L	5.000	N/A
2,4,5-TRICHLOROTOLUENE	NG/L	5.000	N/A
2,6,A-TRICHLOROTOLUENE	NG/L	5.000	N/A
CHLOROPHENOLS			
2,3,4-TRICHLOROPHENOL	NG/L	50.	N/A
2,3,4,5-TETRACHLOROPHENOL	NG/L	50.	N/A
2,3,5,6-TETRACHLOROPHENOL	NG/L	50.	N/A
2,4,5-TRICHLOROPHENOL	NG/L	50.	2600000 (D4)
2,4,6-TRICHLOROPHENOL	NG/L	50.	2000. (B4)
PENTACHLOROPHENOL	NG/L	50.	30000. (B4)
CHEMISTRY (FLD)			
FIELD COMBINED CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD FREE CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD TOTAL CHLORINE RESIDUAL	MG/L	N/A	N/A
FIELD PH	DMSNLESS	N/A	6.5-8.5 (A4)
FIELD TEMPERATURE	°C	N/A	<15 °C (A1)
FIELD TURBIDITY	FTU	N/A	1.0 (A1)
CHEMISTRY (LAB)			
ALKALINITY	MG/L	.200	30-500 (A4)
CALCIUM	MG/L	.100	100. (F2)
CYANIDE	MG/L	.001	.20 (A1)
CHLORIDE	MG/L	.200	250. (A3)
COLOUR	TCU	.5	5.0 (A3)
CONDUCTIVITY	UMHO/CM	1.	400. (F2)
FLUORIDE	MG/L	.01	2.4 (A1)
HARDNESS	MG/L	.50	80-100 (A4)
MAGNESIUM	MG/L	.05	30. (F2)

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE
NITRITE	MG/L	.001	1.0 (A1)
TOTAL NITRATES	MG/L	.02	10. (A1)
NITROGEN TOTAL KJELDAHL	MG/L	.02	N/A
PH	DMSNLESS	N/A	6.5-8.5(A4)
PHOSPHORUS FIL REACT	MG/L	.0005	N/A
PHOSPHORUS TOTAL	MG/L	.002	.40(F2)
SULPHATE	MG/L	.200	500. (A3)
TOTAL SOLIDS	MG/L	1.	500. (A3)
TURBIDITY	FTU	.02	1.0 (A1)
METALS			
ALUMINUM	UG/L	.050	100. (A4)
ANTIMONY	UG/L	.050	10. (F3)
ARSENIC	UG/L	.050	50. (A1)
BARIUM	UG/L	.020	1000. (A1)
BORON	UG/L	.200	5000. (A1)
BERYLLIUM	UG/L	.010	0.20 (H)
CADMIUM	UG/L	.050	5.0 (A1)
COBALT	UG/L	.020	1000. (H)
CHROMIUM	UG/L	.100	50. (A1)
COPPER	UG/L	.100	1000. (A3)
IRON	UG/L	5.0	300. (A3)
MERCURY	UG/L	.01	1.0 (A1)
MANGANESE	UG/L	.050	50. (A3)
MOLYBDENUM	UG/L	.020	500. (H)
NICKEL	UG/L	.100	50. (F3)
LEAD	UG/L	.020	50. (A1)
SELENIUM	UG/L	.200	10. (A1)
SILVER	UG/L	.020	50. (A1)
STRONTIUM	UG/L	.100	2000. (H)
THALLIUM	UG/L	.010	13. (D4)
TITANIUM	UG/L	.100	N/A
URANIUM	UG/L	.020	20. (A2)
VANADIUM	UG/L	.020	100. (H)
ZINC	UG/L	.020	5000. (A3)
PHENOLICS			
PHENOLICS (UNFILTERED REACTIVE)	UG/L	.2	2.0 (A3)
PESTICIDES & PCB			
ALDRIN	NG/L	1.0	700. (A1)
AMETRINE	NG/L	50.	300000. (D3)
ATRAZINE	NG/L	50.	60000. (B3)
ALPHA HEXACHLOROCYCLOHEXANE (BHC)	NG/L	1.0	700. (G)
BETA HEXACHLOROCYCLOHEXANE (BHC)	NG/L	1.0	300. (G)
GAMMA HEXACHLOROCYCLOHEXANE(LINDANE)	NG/L	1.0	4000. (A1)
ALPHA CHLORDANE	NG/L	2.0	7000. (A1)
GAMMA CHLORDANE	NG/L	2.0	7000. (A1)
BLADEX	NG/L	100.	10000. (B3)
DIELDRIN	NG/L	2.0	700. (A1)
METHOXYCHLOR	NG/L	5.0	900000. (B1)
ENDOSULFAN 1 (THIODAN I)	NG/L	2.0	74000. (D4)
ENDOSULFAN 2 (THIODAN II)	NG/L	4.0	74000. (D4)
ENDRIN	NG/L	4.0	200. (A1)
ENDOSULFAN SULPHATE(THIODAN SULPHATE)	NG/L	4.0	N/A

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE	
HEPTACHLOR EPOXIDE	NG/L	1.0	3000.	(A1)
HEPTACHLOR	NG/L	1.0	3000.	(A1)
METOLACHLOR	NG/L	500.	50000.	(B3)
MIREX	NG/L	5.0	N/A	
OXYCHLORDANE	NG/L	2.0	N/A	
O,P-DDT	NG/L	5.0	30000.	(A1)
PCB	NG/L	20.0	3000.	(A2)
O,P-DDD	NG/L	5.0	N/A	
PPDDE	NG/L	1.0	30000.	(A1)
PPDDT	NG/L	5.0	30000.	(A1)
ATRATONE	NG/L	50.	N/A	
ALACHLOR	NG/L	500.	35000.	(D2)
PROMETONE	NG/L	50.	52500.	(D3)
PROPAZINE	NG/L	50.	16000.	(D2)
PROMETRYNE	NG/L	50.	1000.	(B3)
SENCOR (METRIBUZIN)	NG/L	100.	80000.	(B2)
SIMAZINE	NG/L	50.	10000.	(B3)
POLYAROMATIC HYDROCARBONS				
PHENANTHRENE	NG/L	10.0	N/A	
ANTHRACENE	NG/L	1.0	N/A	
FLUORANTHENE	NG/L	20.0	42000.	(D4)
PYRENE	NG/L	20.0	N/A	
BENZO(A)ANTHRACENE	NG/L	20.0	N/A	
CHRYSENE	NG/L	50.0	N/A	
DIMETHYL BENZO(A)ANTHRACENE	NG/L	5.0	N/A	
BENZO(E)PYRENE	NG/L	50.0	N/A	
BENZO(B)FLUORANTHENE	NG/L	10.0	N/A	
PERYLENE	NG/L	10.0	N/A	
BENZO(K)FLUORANTHENE	NG/L	1.0	N/A	
BENZO(A)PYRENE	NG/L	5.0	10.	(B1)
BENZO(G,H,I)PERYLENE	NG/L	20.0	N/A	
DIBENZO(A,H)ANTHRACENE	NG/L	10.0	N/A	
INDENO(1,2,3-C,D)PYRENE	NG/L	20.0	N/A	
BENZO(B)CHRYSENE	NG/L	2.0	N/A	
CORONENE	NG/L	10.0	N/A	
SPECIFIC PESTICIDES				
TOXAPHENE	NG/L	N/A	5000.	(A1)
2,4,5-TRICHLOROBUTYRIC ACID (2,4,5-T)	NG/L	50.	200000.	(B4)
2,4-DICHLOROBUTYRIC ACID (2,4-D)	NG/L	100.	100000.	(A1)
2,4-DICHLORORPHENOXYBUTYRIC ACID	NG/L	200.	18000.	(B3)
2,4-D PROPIONIC ACID	NG/L	100.	N/A	
DICAMBA	NG/L	100.	120000.	(B1)
PICLORAM	NG/L	100.	190000.	(B3)
SILVEX (2,4,5-TP)	NG/L	50.	10000.	(A1)
DIAZINON	NG/L	20.	20000.	(B1)
DICHLOROVOS	NG/L	20.	N/A	
DURSBAN	NG/L	20.	N/A	
ETHION	NG/L	20.	35000.	(G)
GUTHION(AZINPHOSMETHYL)	NG/L	N/A	20000.	(B1)
MALATHION	NG/L	20.	190000.	(B1)
MEVINPHOS	NG/L	20.	N/A	
METHYL PARATHION	NG/L	50.	7000.	(A1)
METHYLTRITHION	NG/L	20.	N/A	

SCAN/PARAMETER	UNIT	DETECTION LIMIT	GUIDELINE	
PARATHION	NG/L	20.	50000.	(B1)
PHORATE (THIMET)	NG/L	20.	2000.	(B3)
RELDAN	NG/L	20.	N/A	
RONNEL	NG/L	20.	N/A	
AMINOCARB	NG/L	N/A	N/A	
BENONYL	NG/L	N/A	N/A	
BUX (METALKAMATE)	NG/L	2000.	N/A	
CARBOFURAN	NG/L	2000.	90000.	(B1)
CICP (CHLORPROPHAM)	NG/L	2000.	350000.	(G)
DIALLATE	NG/L	2000.	30000.	(H)
EPTAM	NG/L	2000.	N/A	
IPC	NG/L	2000.	N/A	
PROPOXUR (BAYGON)	NG/L	2000.	90000.	(G)
SEVIN (CARBARYL)	NG/L	200.	90000.	(B1)
SUTAN (BUTYLATE)	NG/L	2000.	245000.	(D3)
VOLATILES				
BENZENE	UG/L	.050	5.0	(B1)
TOLUENE	UG/L	.050	24.0	(B4)
ETHYLBENZENE	UG/L	.050	2.4	(B4)
PARA-XYLENE	UG/L	.100	300.	(B4)
META-XYLENE	UG/L	.100	300.	(B4)
ORTHO-XYLENE	UG/L	.050	300.	(B4)
1,1-DICHLOROETHYLENE	UG/L	.100	7.0	(D1)
ETHLYENE DIBROMIDE	UG/L	.05	.05	G)
METHYLENE CHLORIDE	UG/L	.500	50.	(B1)
TRANS-1,2-DICHLOROETHYLENE	UG/L	.100	70.	(D5)
1,1-DICHLOROETHANE	UG/L	.100	N/A	
CHLOROFORM	UG/L	.100	350.	(A1+)
1,1,1-TRICHLOROETHANE	UG/L	.020	200.	(D1)
1,2-DICHLOROETHANE	UG/L	.050	5.0	(D1)
CARBON TETRACHLORIDE	UG/L	.200	5.0	(B1)
1,2-DICHLOROPROPANE	UG/L	.050	6.0	(D5)
TRICHLOROETHYLENE	UG/L	.100	50.	(B1)
DICHLOROBROMOMETHANE	UG/L	.050	350.	(A1+)
1,1,2-TRICHLOROETHANE	UG/L	.050	.60	(D4)
CHLORODIBROMOMETHANE	UG/L	.100	350.	(A1+)
TETRACHLOROETHYLENE	UG/L	.050	10.0	(C2)
BROMOFORM	UG/L	.200	350.	(A1+)
1,1,2,2-TETRACHLOROETHANE	UG/L	.050	0.17	(D4)
CHLOROBENZENE	UG/L	.100	60.	(D5)
1,4-DICHLOROBENZENE	UG/L	.100	1.0	(B4)
1,3-DICHLOROBENZENE	UG/L	.100	130.	(G)
1,2-DICHLOROBENZENE	UG/L	.050	3.0	(B4)
TRIFLUOROCHLOROTOLUENE	UG/L	.100	N/A	
TOTAL TRIHALOMETHANES	UG/L	.500	350.	(A1)
STYRENE	UG/L	.05	140.	(D5)